Erasmus School of Economics School Council 146
Date: Thursday 1 February 2018 at 10.00
Location: H 12-30

Draft Agenda

1. Welcome and adoption of the agenda
2. Announcements
3. Minutes of the 145th School Council (text) *(approval)* ./.
4. Follow up issues of the 145th School Council

EDUCATIONAL MATTERS

5. From Student Council:
   - Membership of both School Council and Programme Committee ./..
   - Exchange *(information)*
6. Evaluation Innovation Hub (QIP) *(discussion/approval)* ./
7. Milestone thesis (documents in shared folder SC 145) *(discussion/approval)*
   (other documents will be sent later, if/when available)

ORGANISATIONAL MATTERS

8. Resolutions Management Team November and December 2017 *(information)* ./..
9. Postal Items Management Team December 2017 *(information)* ./.
10. Any other business
11. Closing

*For information:*
- Letter SC approving restructuring ESE secretariats ./.

Draft Minutes of the Erasmus School of Economics School Council 145

Date: Thursday 7 December 2017 at 10.00, H 12-30

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Present:

Student Council: Sibren Iwema (SI, Chair), Elena Vollmer (EV), Veroniek Visser (VV), Seungwon Kim (SK), Abdurrahman Calkin (AC)

Personnel Council: Harry Trienekens (HT/vice-chair/chair Personnel Council), Vladimir Karamychev (VK), Rommert Dekker (RD), Brian Chung (BC) Ajay Bhaskarabhatla (AB), Lidewij Hickey (LH)

Other participants: Dean Philip Hans Franses (PHF), Vice-dean Ivo Arnold (IA), Margaretha Buurman (MB) Head Dean's Office, Thomas Michelotti, President Faector, Brigitte Hoogendoorn (BH) (only item 7), Secretary participation bodies Paula Endeveld (PE, minutes)

Not present: Student Council: Yasmin Chen, Nordin de Korte (NK)

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1. Welcome and adoption of the agenda
   The agenda is adopted as proposed.

2. Announcements
   IA informs the School Council that the institutional audit have taken place and that ESE is now busy preparing for the trail-trajectory in January 2018.
   SI invites all present to participation drinks that will take place on 11 December from 17-19 hrs.
   PE informs all present that -until now- there were no reactions to fill in the vacancy in the School Council. However, it is still be possible for personnel members to nominate themselves.

3. Minutes of the 144th School Council
   The minutes are approved as presented.

4. Follow up issues of the 144th School Council
   - *Evaluation TT*: MB informs the SC that the first draft is discussed with the CBBA and she expects that a report on this will only be available as of March.
   - *Quality Impetus*: will be discussed this meeting (item 6).
   - *CFA*: MT sent a support letter, this is still in progress.
   - *Renovation*: PHF explains that neighbours have concerns regarding the lights of campus buildings like the Library and the new planned 19th floor of Tinbergen building. The latest news regarding the Polak building is that it is expected to be available again after March. In the meantime, extra study places are set up to accommodate students.
   - *TA data collection*: personal information of Teaching Assistants will be saved in folders with limited access.
   - *TA attendance*: Student Council requested data from QIP and sent it on to the PC's for discussion. Student Council will collect comments from PC's on this and, if necessary, set up a focus group to come up with recommendations. IA suggests to invite ESE's educational expert Bas van Goozen to a meeting.
   - *Sustainability*: MB stresses that she will be available until 21st December to discuss this with representatives of the SC. SK hopes to provide some concrete proposals in the 147 SC meeting.
   - *Course evaluation*: open comments are made invisible for all students, can be deleted from action list
   - *Attendance level* students at Dies Natalis: in general, student members feel that they are not the target group for the keynote speakers. They suggest to involve students in preparing the program for the day. Furthermore, at the end of the afternoon, when the dies takes place, large groups of students have to attend courses.

EDUCATIONAL MATTERS

5. From Student Council:
   - Use of English within courses ESE:

VV explains the four propositions:
1. Inform students beforehand that in the Dutch Bachelor it may happen that courses may be offered in English. IA will discuss with the educational marketing department how this can be implemented in the education marketing.
2. Offer slides and example tests for Dutch courses in Dutch (also if the books are in English)
VV explains that now, example tests are sometimes in English (although the exam itself is in Dutch).
IA stresses that the policy is to offer exams in Dutch during the first two years of the Dutch BA programmes. This involves also practice exams. Only if there is no alternative, programmes can turn to courses taught in English. This is expected to be more and more the case.
IA offers to investigate how widespread the problem is and a solution will then be discussed. If data are not available, information could be gathered from the Programme Committees.
3. The problems with Philosophy of Economics and Mathematical Economics are solved.
4. Lecturers' level of English: SC members noted that the question about the level of lecturers' English is removed from the questionnaires. IA will investigate whether this can be re-installed.
MB: adds that now the level of English is part of the appointment procedure and that lecturers can take specialized courses.

- ESE's listing in guidebook (in Dutch: "keuzegids")
IA agrees with the students that ESE's place (second from below) in the ranking of the 'keuzegids' is disappointing. All EUR schools have low scores, partly due to low scores on facilities. Furthermore, the guidebook made a different choice from the raw data for the ranking. Another cause may be that students in other, smaller programmes that offer a more focussed programme, might value their study different in comparison to ESE students that choose a broad Bachelor and have to follow courses they do not necessarily prefer.
IA: informs the SC that ESE is seriously looking into ways to improve the exams and that the capacity of study advisors is doubled.
RD: asks what ESE can contribute concretely to make sure that the scores for facilities will increase. PHF: remarks that he discusses this issue continuously with the board and the facilities department and that he will continue to do this. When the Polak building will re-open, 1600 work stations / study places will be available.

- Proposal merchandising
AC: updates the SC and MT on merchandising. The sale of ESE sweaters is yet a bit disappointing. The suggestion is to show slides with ads during courses' breaks. This has been done before and AC will discuss this with marketing officers of EFR and Faector.

- Students with a disability
The SC does not discuss individual cases, however, for the ESE student that informed the press regarding her experiences at the EUR, IA informs the SC that one study adviser has been appointed as case manager. She will take care of any issues that will come up. However, MT ESE can not promise that there will be never issues again, since University Service Centre is in the lead when it regards for example accessibility of the EUR campus.

- "Challenge accepted" fund - investments
The Student Council expresses their concern regarding responsible investments of the funds. The School Council agrees to send a letter to EUR Executive Board/University Council. SI will draft a letter and will send it to all members for comments.

6. Update Quality Impetus Project (QIP)
The report is quite concise, IA informs the SC that next meeting the evaluation of the innovation hub will be on the agenda.

7. Milestone thesis detailed plans
IA and BH explain that in the current proposal the most important objective is to move away from the open ended process that the thesis now is. The aim is reducing the amount of students that need a lot of time writing their thesis. The Programme Committes discussed the plans and sent their advices and comments to the Programme Management (cc School

Council.) The separate programmes have incorporated suggestions for variations that will better fit their Programme. The Programme Management decided that some variation will be possible and the details will be discussed per programme.
In this meeting, a general approval of inserting deadlines is requested from the School Council.

HT informs the Programme Director that the Personnel Council foresees that implementing this plan might evoke other problems. For example Master students that have to do resits as well as writing their thesis.
VK: adds that most likely far more students will take the 'examination committee route'.
RD: adds that a solution for this might be to re-schedule the master resit to April, so after that students can work on their Master thesis.

BH: will take this suggestion into consideration and adds that students have a number of reasons to postpone finishing (this differs also from programme to programme).
IA: adds that ESE Masters are one year programmes: there is a large group that pass all courses and then take a very long time finishing the master thesis.

RD: points out that the Personnel Council would rather have incentives than punishments (deadlines) to reach the goal of finishing the thesis earlier.
BH: explains that setting a deadline is not meant as punishment, but rather as an incentive to help students finish earlier.
BC: believes that implementing the system next academic year will be too soon and suggests to seek the opinion from colleagues who supervises large numbers of students successfully and in time.
RD: adds that introducing a monitoring system for the Master students would also help.

VV: asks if students who have to start over again can use the same data?
BH: indicates that this is possible, with another supervisor and (most likely) a changed research question.
VV: asks whether one starting moment will not put extra pressure on supervisors and how will this be handled in relation to exchange?
BH: allocation will be more transparent and it will be more clear at an earlier stage how many supervisors will be needed. Students who want to do an exchange, can make this known at the start of the thesis.

BC: asks if this proposal will cater for students that do internships with companies that only take students for (over) 6 months?
BH: these students are not the group that will have trouble finishing in time. It will still be possible to do intensive internships within the proposed timeframe.

TM: unfolds his personal study plan for next year that does not seem to fit in the proposal.
BH: offers to provide the SC with different cases that will fit in the system, including TMs studyplan, to show the flexibility of the proposal.

VK: suggests implementing a system with personal, flexible deadlines for start and finish (every master students will have the same amount of time for writing the thesis and for a resit).

Over all, the School Council is still concerned that the proposed plan leaves not enough room for flexibility and exceptions. Due to time constraints, the SC will discuss this further in a separate meeting or per e-mail and will send their general comments in the advice letter to the Programme Management.

HR MATTERS

8. Restructuring Secretariats

HT: informs the MT that the Personnel Council, although the members were slightly surprised to see that the plan will start as of 1 January, have no objections. However, they will organise a meeting with the secretaries in the coming weeks and after that, will send their advice to the MT.

ORGANISATIONAL MATTERS

**9.** Resolutions Management Team October 2017

no comments

**10.** Postal Items Management Team October and November 2017

no comments

**11.** Any other business

AC: heard the rumour that the pilot for IBEB weblectures will not go on.
IA will check whether this is true.

RD: has some concerns regarding IT facilities and stresses again the importance for ESE researchers to install programming programmes on EUR and home computers. Since Reino de Boer, demand manager IT, is working on proposals for this, he would like to be informed. MB will ask RdB to share the proposals with the SC.

RD: asks if the appointment process has been speeded up. MB: replies that rules are installed to prescribe the processing time for appointments. In case of very complicated cases, this may be exceeded.

RD: asks whether problems with the examination administration are solved?
IA: replies that this is still not the case, ESE appointed an officer to take care of and solve the issues. Still, the EA refuses to cooperate in some cases. The ESE considers to remove these tasks from the USC.

BC: informs the MT that he has requested a flexible desk two months ago, but still did not receive any replies. MB: would like to receive copies of the e-mails that were sent, so that she can take action.

Since it was MB's last SC meeting, SI takes this opportunity to thank her for the cooperation. MB replies that she is also grateful for the constructive cooperation with the School Council to make ESE a still better place to work and study.

**12.** Closing

12.15 hrs

Follow-up issues:

| | | | | |
|---|---|---|---|---|
| 1. | Tenure track & Evaluation | Evaluation Tenure Track<br>- Further adjustments CBBA criteria<br>- Is internal competitiveness felt?<br>- Does student evaluations differ for male/female teachers? | Replace-ment MB | SC 148 |
| 2. | Quality Impetus | Update every other meeting | IA | SC 147 |
| 3. | CFA | Is ESE willing to be a partner in level 1 exam?<br>MT wrote a support letter, still in progress | IA | SC 146 |
| 4. | Renovation | Update when available | PHF | 2017/2018 |
| 5. | TA | Request input from PC's on which kind of tutorials are preferred | Student Council (EV & SI) | SC 147 |
| 6. | ESE Sustainability | Draft a report with recommendations on how to improve/ be more visible should be concrete, so postpone | Student Council (SK) | SC 147 |
| 7. | Use of English in the Dutch Ba programmes | -How to inform prospective students better<br>- How widespread is the problem of English slides and test exams?<br>- Re-installing the question regarding lecturer's English level | IA | SC 146 |
| 8. | Update marketing | Is it possible to use slides during lectures' breaks for ads | AC | SC 146 |
| 9. | Investments challenge accepted fund | Write a letter to Executive Board (cc University Council) | SI | SC 146 |
| 10. | Rumour pilot ESE weblectures cancelled? | Check whether this is true. | IA | SC 146 |
| 11. | Safeguard possibilities for researchers to install programming programmes | Could proposals (by RdB) be shared with ESE community | MB-RdB | SC 146 |

# Memo

**Regarding:** Student membership of SC and PC in the same academic year
**Input:** from combined meeting student members Programme Committees and SC and from Programme Committee E&BE

**Date:** 22-01-2018

Student members discussed this topic in the combined meeting of SC and PCs.

They concluded it is not desirable that students take a seat in both bodies, because it is important to have as much representatives in participation bodies as possible. The Student Council would like to see that students, who make themselves eligible for the School Council, should be discouraged to apply for PC membership. This should be made clear prior to SC elections.

# Evaluation Quality Impetus Programme


January 2018

*Author*: Monique Klück, Programme manager Quality Impetus Programme
On behalf of the Project group Quality Impetus

# Table of Contents

## Introduction

March 2016 the Erasmus School of Economics started the Quality Impetus Programme (QIP).[1] This programme aims to improve the quality of education. The Erasmus Executive Board has provided funds for incidental costs (for the period 2016-2017) and funds for structural costs for realising these goals. The Quality Impetus Programme ends on 31-12-2019.

The Programme originally consisted of five topics:

1. Improving the tutorial system by establishing a Tutor Academy
2. Stimulating the use of blended approaches to learning
3. Introducing more small scale teaching in large scale master courses
4. Integration of acquired knowledge by means of the Umbrella Project
5. Improving Skills education

During the implementation of the programme topics 2 and 3 and topics 4 and 5 were combined.

This report describes the results we achieved in the period 2016- 2017.

[1] Implementation Programme Quality Impetus ESE, version 5.0 march 2016

## 1. The Tutor Academy

The first goal of the QI Programme is improving the quality of tutorials in Bachelor 1 and 2 by establishing a Tutor Academy. According to the planning of the QIP implementation Programme the Tutor Academy had to be up and running by September 2016. This target has been realised.

To realise the Tutor Academy, an implementation team, consisting of several course coordinators and members of staff, has drafted an Outline of the new processes to professionalise the promotion, selection, training and guidance, and evaluation of tutors.[2] Furthermore, the implementation team has drafted a job description for the teachers of the Tutor Academy. These documents (Outline and job description) have been the starting point for the Tutor Academy. In September 2016 the new Tutor Academy team - consisting of eight teachers, two administrative assistants and one director – has started.

In September 2017 a detailed evaluation of the first year Tutor Academy and the impact of the Tutor Academy on the quality of tutorial teaching has been realised. A report of this evaluation has been sent to ESE Management and to the School Council.[3] Conclusion of these first evaluation:

> "After just one year the Tutor Academy team has an active role in the recruitment, selection, training and guidance of over 260 teaching assistants. The recruitment process is improved and more transparent. By means of a Tutor Academy website students are better informed about the possibilities to work as a tutor. The didactical training and guidance of tutors is improved. The performance of tutors is monitored and subject of evaluation, which leads to further actions if necessary.
> Nevertheless, a lot remains to be done; training of experienced tutors can be extended, the current level of guidance and communication can be improved, evaluation of tutors and the improvement of tutorials have just started."

The evaluation of the Tutor Academy will be repeated after the end of the academic years 2017-2018 and 2018-2019. Depending on the results of these evaluations, a decision will be made about the continuation of the Tutor Academy after 2019 (when the QIP programme will end).

## 2. Stimulating blended learning and small scale teaching in large scale courses

The use of blended learning approaches and the introduction of more small scale teaching in large scale courses has been stimulated by:

1. The installation of 'The Innovation Hub'
2. Practical support and extra funding for projects to implement blended learning approaches and intensify teaching in large scale courses

[2] Outline Tutor Academy 2.0 June 2016
[3] The Tutor Academy, Experiences in the first year, 07-09-2017

### 2.1. The Innovation Hub

The Innovation Hub aims to support the school in making knowledge about educational innovations easily accessible, to facilitate exchange of experiences, and to provide technical and didactical expertise.

The Innovation Hub consists of a support team and a website[4] . The support team started in May 2016 and now consists of two educational officers (1.8 fte) and a web manager (0.2 fte) supported by teaching assistants if necessary. The website is up and running since April 2017.

The Innovation Hub facilitates the use of digital educational tools and keeps faculty informed about developments related to teaching innovation and blended learning. The website of the Innovation Hub gives an overview of all teaching tools currently available within ESE and provides a platform for teachers to share their experiences with innovative teaching methods and digital tools.

The support team helps teachers to formulate and implement educational innovation in their courses. The support team also provides the necessary digital tools, realizes the necessary licence agreements and is a helpdesk for all questions teachers have on (online) education. The support team actively participates in the EUR Community for Learning and Innovation.

Furthermore, the support team has realised several promotional activities to promote the Innovation Hub and to stimulate the introduction of blended learning approaches and more small scale teaching. Examples of promotional activities are the workshops on educational renewal and blended learning at the ESEbility meetings in 2016 and 2017 and presentations of digital tools at several department meetings. Another example is the introduction in 2017 of the Educational Innovation Award; this is an award for teachers who have made a special contribution to the improvement and innovation of education. A jury, consisting of two student representatives and two staff members, selects the winner.

Another important task of the Innovation Hub team is the provision of digital educational tools, including personal advice, hands on support for users and periodical evaluation of the tools on usage and performance.
Before the start of the Innovation Hub some digital educational tools were available. However, the number of available digital educational tools has been increased and the available support has been improved because of the Innovation Hub. See appendix 1 for an overview of currently available tools.

On the website of the Innovation Hub, faculty members can find information about the available tools. The Innovation Hub team members actively promote the use of the available tools by showing them to lecturers and organising small demos. On the Innovation Hub website as well as in the ESE and QIP newsletters, experiences with the implementation of digital learning tools have been shared.

Up to now, the Innovation Hub team has advised 70-75 ESE teachers on educational matters.

[4] This website is currently unavailable due to the migration of the EUR website to a new platform.

## 2.2. Practical support and extra funding for projects

An important part of the QI Programme consists of the funding of projects to improve education by introducing new, blended forms of teaching and/or implementing more small scale teaching in large courses.

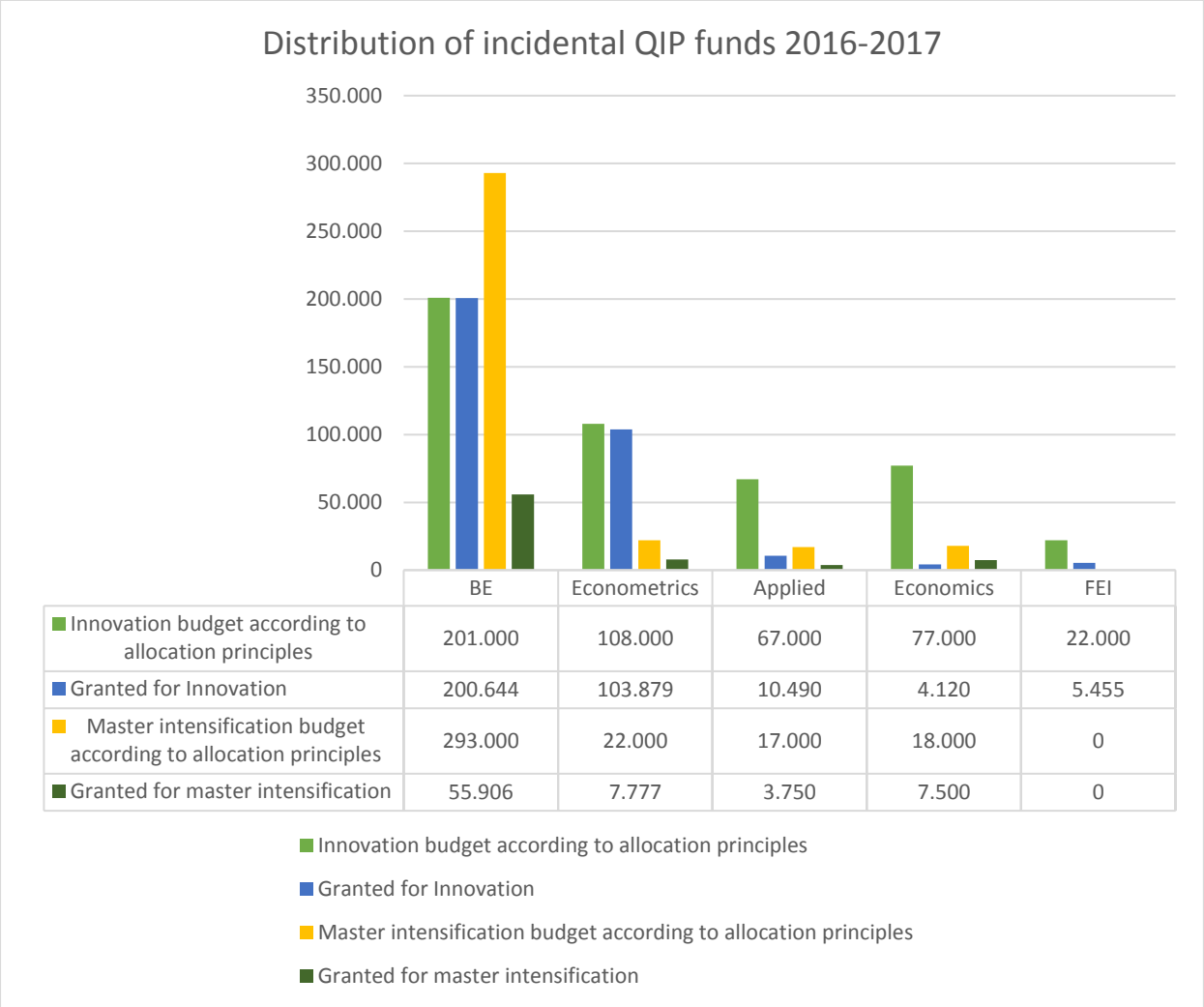
### *2.2.1.Funding*

Teachers could (and can) apply for funding of the development costs and –under certain conditions- the cost of structural extra budget for future capacity or tools.

In the period 2016-2017 two types of funding were available:

1. The Innovation Hub funds; funding of innovation projects aiming at introducing blended forms of learning. Only incidental costs were compensated.
2. The master intensification funds: funding of innovation projects aiming at introducing more small scale forms of teaching in large master courses. Incidental development costs were compensated, as well as the costs of (structural) extra staff necessary to continue the realised changes.

At the start of the QI Programme management of ESE has agreed upon certain allocation principles for the two innovation funds. See for an overview of the agreed allocation principles and the actual distribution of granted project funds between the ESE educational departments figure 1 below.




| | BE | Econometrics | Applied | Economics | FEI |
|---|---|---|---|---|---|
| Innovation budget according to allocation principles | 201.000 | 108.000 | 67.000 | 77.000 | 22.000 |
| Granted for Innovation | 200.644 | 103.879 | 10.490 | 4.120 | 5.455 |
| Master intensification budget according to allocation principles | 293.000 | 22.000 | 17.000 | 18.000 | 0 |
| Granted for master intensification | 55.906 | 7.777 | 3.750 | 7.500 | 0 |

Figure 1 Distribution over departments of incidental funds

As you can see in Figure 1, most of the innovation funds are spent in the department of Business Economics and Econometrics. Expenditure on incidental funds in the departments of Applied Economics and Economics is relatively low. None of the departments has spent more than agreed upon at the start of the QI Programme.

### *2.2.2. Bottom-up incremental approach*

ESE has chosen a bottom-up approach of innovation and change. ESE-lecturers are skilled professionals with a professional responsibility for the design and content of the courses they teach. Intrinsic motivation of teachers for educational change and/or introduction of digital tools in courses is essential for the success of an innovation. Therefore, the course coordinator has to be the initiator to start a project and has to act as project leader. The role of the QI Programme is to increase awareness and actively encourage teachers to start with educational improvements.
ESE student satisfaction in general is fairly high, student numbers are high and possible failure can have a huge impact on student satisfaction. As a consequence, most teachers are cautious and prefer an incremental approach to change[5]. Most innovation projects therefore do not entail a total redesign of courses but lead to improvements within the existing design.

### *2.2.3. The projects*

In the programme period (2016-2017) 35 projects applied for funding. 33 projects have been realised or are currently in progress, 1 application has been rejected and 1 has been withdrawn after approval, because the conditions could not be met by the applicant.

The extent of the realised projects varies between small improvements in current education to total course redesign. In appendix 2 of this document you will find a list of all approved projects.

### *2.2.4. The procedure*

At the start of the QI Programme all initiatives to improve education by introducing new, blended forms of teaching and/or implementing more small scale teaching were welcomed. The application for funding was initially free of format. The only requirement was that all applications had to be approved by the Department Director and the Programme Director.

Over time, the QI Programme developed a more structured approach. All applications now start with a formal application using an application format (appendix 3). In this format the applicant has to describe the 'problem' or situation he wants to change, the way he is going to do this, the intended outcome or objectives, the planning, budget needed and the manner of evaluation of the results.

After completion, the project applicants are asked to complete an evaluation format (appendix 4); did the applicant realise the intended changes, what were the results, will the innovation be continued in the future and what actions are needed to realise such a continuation? The project team QIP discusses the completed evaluations. The evaluations are also discussed with the Programme Director. If necessary decisions are made about the continuation of the improvement.

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5 Exceptions are e.g. the redesign of the courses Marketing and ICT ((see appendix 5 no.1 and no. 7)

### *2.2.5. Educational results of the projects*

The realised innovation projects all contributed to one or more of the following aspects of teaching and learning:

| **Aspect of ESE vision** | **projects** |
|---|---|
| Applying interactive teaching methods which contribute to higher order thinking skills, such as analysing, synthesizing and evaluating. | 1, 2, 3, 6, 10, 12, 13, 20, 21 |
| Using different (digital) teaching tools to stimulate engagement and understanding. | 1, 3, 6, 7, 16, 19, 20, 21 |
| Using modern media to align with students' experiences and perceptions | 1, 11, 16 |
| Using lectures to provide more in-depth knowledge and applying knowledge to current affairs | 1, 13 |
| Providing weblectures or webcasts to make time and place independent learning possible | 1, 7, 20 |
| Organising teaching in small groups if possible, to enhance contact with teachers and fellow students | 1, 2, 8, 14, 18, 20 |
| Providing intermediate individual feedback and formative assessments | 1, 3, 4, 6, 7, 12, 14, 19, 20 |
| Using different forms of summative assessment | 1, 5, 9, 16, 17 |
| Enhancing the efficiency of the teaching process. | 5, 7, 9, 20 |

A report on the future of ICT in education to be discussed with faculty, will be completed in the coming months.

Some projects have led to changes in one course only, but other projects have inspired more course coordinators to implement changes in their own courses. For example the paper-to scan evaluation system which has been introduced in the ANS project (no. 9 appendix 2 and 5) is now used in more than ten different courses (and more to come next academic year). Furthermore, the system is also used at the Rotterdam School of Management and the Erasmus University College.
Another example of an inspirational project is the project regarding the creation of supplementary digital practice material in Sowiso (no. 3 appendix 2 and 5). Two more projects using Sowiso to improve ESE-courses have started recently (no. 22 and 31).

All bachelor students and most master students have been benefiting from one or more of the realised changes. Projects have been realised for bachelor and master courses. See figure 2.

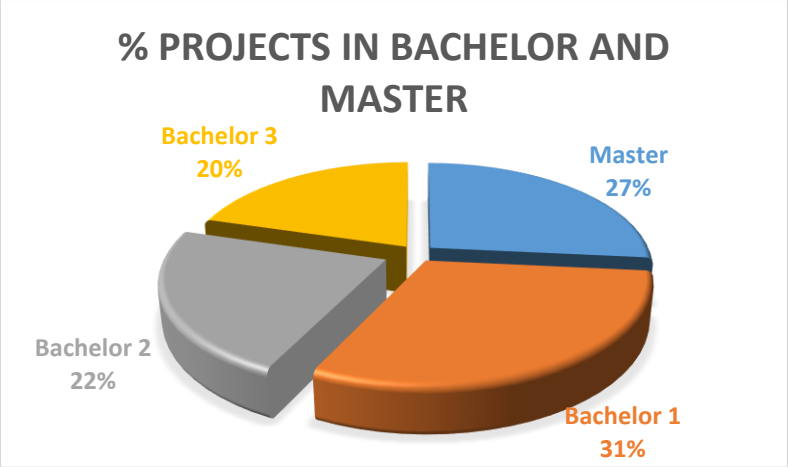


*Figure 2*

Teaching in some large master courses (see no. 8, 12 and 14, appendix 2 and 5) has been intensified. The largest master courses however are in the sections Accounting and Finance. Renewal of these large master courses has not been realised yet, mostly due to a shortage of staff at the department of Business Economics. As mentioned above recruiting of a new lecturer, who should be responsible for the educational renewal of the accounting and finance programme, has not succeeded yet.

In appendix 5 you will find the individual evaluations by the project leaders of the finished projects (not all projects are finished yet).

### 2.3. Lessons Learned

Looking back after almost two years of stimulating blended learning and small scale teaching the following observations can be made:

1. ***Integration.*** Introducing a digital tool is more effective when the tool is clearly integrated in the design of a course and students get clear instructions why and how to use the tool.
   For example, in one of the projects (no. 7 appendix 2 and 5) short webcasts were made available on YouTube. This proved to be a bit confusing for students: what is essential information for the exam, how do I study, how do I extract important information from a video? Which ones show essential information, which ones are for background knowledge?

2. ***Time.*** Time is very important for the willingness of teachers to innovate their courses.
   Many teachers are only prepared to make changes if it takes not too much of their time, or if the improvement leads to future time savings. One project application was withdrawn when the course coordinator realised that he had to invest his own time to realise the changes in his course.
   When an innovation leads to an increase in work (e.g. more corrections to make or smaller work groups) this is only acceptable for teachers when extra teaching capacity is made available.

3. ***Educational facilities.*** The availability of educational facilities like classrooms or examination facilities are often conditional for the success of an innovation.
   For example to realise enough examination rooms to realise 4 intermediate computerized tests for a B1 ICT course proved to be quite challenging (no. 7 appendix 2 and 5).

Or another example; the introduction of smaller tutorial groups in the course Game Theory (project no. 8 appendix 2 and 5) did not work out because of inconvenient scheduling (tutorials on Friday 16:00-17:45, which was considered too late by the students).

4. ***Teaching assistants***. The role of the teaching assistant is crucial in many projects. TA's are not only necessary to perform routine tasks to unburden the teacher, but they often provide crucial and important input for the success of the project.
   For example with the introduction of the tool Turnitin in the course History of Economic Thought, the TA actively participated in formulating useful criteria (rubrics) and quickmarks and instructed the other TA's how to work with this tool.
   Teachings assistant are not only important for the introduction of change but also for the continuation of change. For example; for the organisation of peer review (no. 12 appendix 2 and 5).

5. ***One improvement leads to another.*** When teachers start with a (small) improvement of a course this often leads to more improvements.
   For example, the introduction of Sowiso, an online learning tool for students makes a change in the educational design and content of the tutorials possible and advisable.
   Another example is the introduction of webcasts for basic knowledge. This can lead to a change in the lectures because it is not necessary anymore to discuss basic knowledge now covered by the webcasts.

6. ***Sharing experiences is valuable.*** Innovation experiences in one course can lead to smoother, easier introduction of similar changes in other courses. Preliminary investigations of which digital tool to use or how to organise support have been done already. Past experiences can be used for improvements.
   For example, in the first pilot with the paper to scan tool ANS (no. 9 appendix 2 and 5) the teacher and student assistants scanned the exams on the copiers at their departments. This was not very efficient, so the next pilot the scan process was performed by Risbo on larger and faster machines.

7. ***Support by dedicated ESE educational experts*** has proven to be of added value. The educational experts of the innovation hub team know ESE procedures, courses, programmes and staff. Furthermore, they have up-to-date information about relevant developments in the school and other ESE innovation projects. This way they can advise and support not only on didactic matters but also on the best way to organise things, using their experience in Economics education.

8. ***Negative views on student motivation*** in relation to teaching and learning can be a hindrance for introducing new educational approaches.
   For example, sometimes teachers are reluctant to introduce interactive teaching methods like peer feedback because they are afraid that students will not participate seriously ('they will not talk about the subject but about their holidays or the weather'). The fear of free riding is also an often heard argument not to introduce group assignments. Online practicing for students is often dismissed because of the fear that students will share the answers on the internet.

9. ***Management and peers*****.** Last but not least; the role of management and professional peers is important for the start and the impact of educational innovation projects. A positive environment and encouragement to introduce new ways of teaching leads to more innovation projects, more sharing of results and therefore more effect of improvements.

## 3. Umbrella project and skills education

The overall aim of this part of the Quality Impetus Programme was to realise a new and coherent study programme that enables students to learn, practice, and develop their academic skills in the bachelor programme at the Erasmus School of Economics (ESE). Furthermore, we aim to increase the connection between the subjects taught in one year, and to repeat and apply skills and knowledge taught across various courses.
Originally realising research clinics for Ba3 students in preparation for the bachelor thesis was also a part of the task of the QI Programme. However, last year the Project Milestone Thesis has started and the subject of research clinics has been integrated in this project.

### 3.1. Umbrella project

To increase the connection between the subjects taught in a year, and to repeat and apply skills and knowledge taught across various courses, the workgroup Educational Renewal[6] has proposed to introduce the Umbrella project: a mandatory part of the bachelor curriculum consisting of students working in small groups on a relevant, current and predetermined economic research question across courses during the entire year.

In 2016 a QIP workgroup has further discussed this idea considering the current level of skills education in the two main bachelor programmes. [7] Their conclusion was to start with the introduction of Skills education in BA Econometrics and continue the development of Skills in BA Economics and Business Economics and to reconsider an Umbrella project, as described by the workgroup Educational Renewal, when the Skills and Knowledge courses are fully developed.

The new skills programme for Econometrics and the renewed skills programme for Economics and Business Economics is currently being introduced. Reconsideration of the Umbrella project, as described by the workgroup Educational Renewal, will take place after completing the introduction of the new skills programmes.

Prior to a final decision on the Umbrella project, the renewed skills programme for Economics and Business Economics contains an umbrella-assignment. The aim of this assignment is to enhance the awareness of students of the complementarities of the courses provided in their study programme and to practice their critical thinking and reflection skills.

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[6] Educational Renewal, Final report January 2016, *Authors*: Josse Delfgaauw, Hrisyana Doytchinova, Wilco van den Heuvel, Brigitte Hoogendoorn, Ronald Huisman, Yuri Peers, and Dana Sisak

[7] This QIP workgroup consisted of the following people: Erik Kole (Econometrics), Nel Hofstra (Business Economics), Richard Paap (Econometrics), Tom van Ourti (Applied Economics), Brigitte Hoogendoorn (Applied Economics), Bas van Goozen (Innovation Hub Team), Monique Klück (Programme Manager QI)

### 3.2. Skills Education

To achieve the goals on skills education three project teams have been working on the improvement of skills education:

1. A team, headed by Dr. Bas Karreman, has developed an intensive skills programme for BA Economics and Business Economics. Part of this programme is also applicable for students Econometrics and students Fiscale Economie.
2. A team, headed by Dr. Remy Spliet, has developed the additional skills programme for Econometrics.
3. A team, headed by Dr. Yvonne Tigelaar-Klootwijk has developed the additional skills programme for Fiscale Economie.

The programme developed by team Karreman has been the starting point for the other teams. Information and expertise has been shared between the teams. All teams have been supported by members of the QIP Innovation Hub Team.
The new academic skills programme is implemented from the academic year 2017-2018 onwards.
The following skills are being trained in the new skills programme:

- Study skills
- Feedback skills
- Discussion skills
- Writing skills
- Research skills
- Presentation skills
- Critical thinking and reflection skills

The start of the skills programme is the same for all bachelor students. From block 3 onwards the skills programme changes depending on the bachelor choice of the student. See the figure below.

<table>
<tr><th>Year</th><th>Block</th><th>Skills for bachelor students Economics/Business economics*</th><th>Skills for bachelor students Fiscale Economie</th><th>Skills for bachelor students Econometrics*</th></tr>
<tr><td rowspan="5">1</td><td>1</td><td colspan="3">Study, feedback & discussion skills</td></tr>
<tr><td>2</td><td colspan="3">Presentation, feedback & discussion skills</td></tr>
<tr><td>3</td><td colspan="2">Writing, Research & feedback skills</td><td>Study skills</td></tr>
<tr><td>4</td><td colspan="2">Writing, Research & feedback skills</td><td></td></tr>
<tr><td>5</td><td colspan="2">Study, Presentation, feedback, writing, critical thinking and reflection skills/umbrella assignment</td><td></td></tr>
<tr><td rowspan="5">2</td><td>1</td><td colspan="2">Presentation & feedback skills</td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td>Writing & feedback skills</td><td></td></tr>
<tr><td>4</td><td></td><td></td><td rowspan="2">Writing, research & presentation skills</td></tr>
<tr><td>5</td><td>Writing, research, feedback & presentation skills</td><td>Writing& feedback skills</td></tr>
</table>

*Dutch and International programmes, including the Double degree programmes

## 4. Costs QI Programme 2016-2017

The total costs of the Quality Impetus Programme until now is provided below:

| | Realisation | Prognosis | |
|---|---|---|---|
| | **2016** | **2017** | **Total** |
| Tutor Academy | 148.070 | 474.466 | 622.536 |
| Teaching Innovation Hub | 260.507 | 343.555 | 604.062 |
| Intensifying master courses | 30.490 | 111.253 | 141.743 |
| Skills/Umbrella Project | 47.154 | 177.990 | 225.144 |
| **Total** | **486.221** | **1.107.264** | **1.593.485** |
| | | | |
| Budget Student Advance Grant | 1.475.000 | 1.763.000 | 3.238.000 |
| To future years | 988.779 | 655.736 | 1.644.515 |

Table 1: total costs QI Programme 2016-2017 NB overhead costs have been allocated

As you can see in the table not all available funds have been spent. There are several reasons for this under-expenditure:

1. The size of the requested budgets for most innovation projects.
   Our experience is that the incidental costs of many projects are relatively low (on average ca. €9,600). Almost all costs are labour costs which are relatively low due to the fact that most applicants hire teaching assistants to support them in the realisation of the plans.
2. Lack of time and therefore less projects than financially possible
   To realise innovations teachers need time. Time is a scarce commodity. The QI Programme has to compete with other projects (Canvas, Thesis project) and the time needed for research and teaching.
3. The current labour market for economists/econometricians
   Given the current labour market for economists/econometricians it is not easy to find new teaching staff, needed for small-scale interactive learning. The department of Business Economics for instance, selected a new full-time lecturer who withdraw his application at the last possible moment. Realisation of plans is not possible without adequate staff.
4. The short period of time available
   It took some time before the QI Programme was up and running. The first part of 2016 was needed to hire new staff for a large part of the QIP-activities like the Tutor Academy or the Innovation Hub team. For instance the first teacher of the Tutor Academy started in august 2016, the first educational officer started in May 2016 and the second started in September 2017.

## 5. Conclusion

In the implementation plan of the QI Programme the following targets have been set.

1. Tutor Academy: up and running by September 2016.
2. Innovation Hub: Innovation team up and running by September 2016, website live by the end of 2016.
3. Skills and Umbrella Project: to be realized by the start of Academic year 2017/2018.
4. Intensification of the large-scale (master) programmes operational from academic year 2017/2018 onwards.

The indicated targets 1 and 2 have been fully met, with the exception of the due date of the website (April 2017 instead of end of 2016). The Skills programme has been realised by the start of Academic year 2017-2018. Target 4 has not been fully met, but improvements have been made in the intensification of some large scale programmes and more improvements are planned.

After two years of QI Programme the Tutor Academy is up and running and the recruitment and guidance of tutors has been professionalised. In at least 49 courses new educational approaches have been realised. Some developments, e.g. the introduction of the ANS-tool or the e-learning platform Sowiso will definitely lead to more changes in the near future. The process of educational renewal and development has been professionalised by the introduction of formats and an evaluation cycle. Dedicated educational expertise and up to date information about digital tools is available for all teachers. Discussions about the improvement of teaching and the introduction of forms of blended learning are in full swing. Last but not least, awareness about the importance of educational renewal has increased.

The Tutor Academy will continue at least in the next two years. In addition, the possibility for course coordinators to apply for extra innovation funds and expertise will be continued in the following years. The QIP budget for 2018 and 2019 has a structural provision for the incidental costs of innovation and intensification projects. Furthermore, the Innovation Hub team continues to support faculty with information and expertise on blended learning and didactics.

The QI Programme has not finished yet. In the next two years the activities of the QI Programme will continue and will be further integrated in the school's activities and educational policies. An important next step will be the discussion about ESE's strategy on ICT in education. A report on the further integration of ICT and educational innovation into the schools educational strategy will be completed spring 2018 and will be based on the lessons learned in the previous years.

# Appendix 1: Available tools

1. **Tools to improve interaction**
   - Shakespeak
   - Kahoot
   - Catchbox
   - Learning Catalytics
   - Mentimeter
   - Discussion forum

The most used tool is Shakespeak. Shakespeak allows teachers to use polls or quizzes during lectures. The students can answer the questions via SMS, Internet or Twitter.
However, we try to encourage teachers to replace traditional large scale lectures if possible by webcasts and more small scale forms of teaching like tutorials. Improving interaction in smaller settings can be achieved by applying non digital methods like discussions or group assignments.

Another digital way to improve interaction in courses is the use of a *discussion forum* or tools to work online on group assignments. Teachers are encouraged to use this in their courses. The new Learning Management System *Canvas* can also help to improve interaction between students and teachers.

2. **Tools for Knowledge transfer**
   - Camtasia
   - Weblectures
   - Livescribe
   - Office mix
   - Media Desktop Recorder
   - Webcast

The most common way to transfer knowledge are lectures and books. Traditional lectures aim to transfer basic knowledge and reach only the students who are present. We encourage teachers to record their lectures and make the recording online available (*weblectures*) or to replace the traditional lectures with short videos (*knowledge clips*) about a particular concept or topic. There are several tools available to make these short videos (Camtasia, Livescribepen, Office Mix, MDR). A teacher can also choose to use the facilities of the Erasmus Media Support Center to make videos. A growing number of ESE teachers has introduced weblectures or knowledge clips in their courses.
Some courses use books with an integrated digital Learning environment. The course Marketing has experimented with an exclusively digital book, but students were not satisfied with this renewal. More promising is the introduction of an e-learning platform like *Sowiso* (see below).

3. **Tools for Practicing knowledge and skills**
   - Sowiso
   - Discussion board
   - EUR Game app
   - Mindmarker
   - Traintool
   - Turnitin Peermark

An essential part of learning is practicing knowledge and skills. Several tools are available to support students with this.
*Traintool* is an app to train communication skills or other soft skills online. This app is now used in the bachelor skills course for all students. With the *Eur Game app* students can test their knowledge. Players can play individually or against each other, enhancing their knowledge at the same time. Two courses are experimenting with the Eur Game app.

Peer feedback, where students give each other feedback on their assignments, can be used to encourage students to test their own study progress throughout the course. For peer feedback lectures can use the digital tool *Turnitin Peermark.*

*Sowiso* is a new tool we recently acquired. Sowiso is an e-learning tool for teaching maths, statistics and possible also accounting. Students can complete exercises step by step, while Sowiso gives them guided feedback on their answers and provides them with the theory they need to complete the exercises. Sowiso is also promising as a way to help master students to refresh or enhance their basic knowledge before they start an advanced course. This academic year several courses are implementing Sowiso as a teaching tool.

**4. Tools for Grading and feedback**

- Turnitin Grademark
- Gradescope
- Ans
- Autolab
- Maple TA

Testing throughout the course helps encourage students to keep up with their studies.
For programming assignments, the online tool *Autolab* is available, while *Maple TA* is a useful tool for quantitative assignments. *Turnitin Grademark* is a digital grading tool which enables you to mark digital exams and insert comments.

*Ans* is a tool that enables digital marking and reflection of all written exams. Ans reduces administrative tasks and makes it easier for teachers to provide students with concrete feedback and to answer questions. This way Ans makes it easier to use open questions and/or essay assignments for large groups of students instead of multiple choice questions.
Other advantages of Ans include the option to mark anonymously, improved possibilities of reviewing exams and the ability to provide students with helpful feedback without too much hassle. Ans has been tested last academic year and will be used in up to 10 courses this year.

# Appendix 2: Overview of approved projects

**Projects effective in academic year 2015-2016**

1. Complete restyling of course introducing webcasts, interactive tutorials, digital books and more (Yuri Peers, Vijay Hariharan, Bas Donkers)
2. Learning quantitative methods by doing (Teresa Bago d'Uva)

**Projects effective in academic year 2016-2017:**

3. Creation of supplementary digital practice material in Sowiso (Applied Statistics 1: Michel van de Velden)
4. Introducing the use of "Formative assessment" (Quizzes) (Econometrics 2: Michel van der Wel)
5. Digitalizing the correction of handwritten exams with ANS Pilot 2 (Theo Hoogwout)
6. Autolab: Innovative Grading Tools for Programming Assignments (Econometrics Gertjan van den Burg)
7. Redesign B1 course ICT: Introducing automatic grading and feedback/developing videos/include algorithmic thinking (Paul Bouman, Kim Schouten)
8. Introducing Tutorials in Economics of Organisations, Game Theory, Industrial Organisations (Zara Sharif)
9. Digitalizing the correction of handwritten exams with ANS Pilot 1 (Kevin Dalmeijer)
10. Developing online modules for background knowledge (Emöke Oldenkamp)
11. Development and moderation of discussion forums on Blackboard (Emöke Oldenkamp, Christiaan Heij)
12. Less instruction more active learning (redesign and introducing peer review (Erik Kole)
13. Boosting the Social Intelligence of Students in the Marketing Master Programme (Willem Verbeke)
14. Advancing the Statistical Knowledge of Marketing Master's Students (Vijay Hariharan)
15. Redesign of the course Philosophy of Economics (Jack Vromen)
16. Innovating the Finance programme: finance 2 (Esad Smajlbegovic, Patrick Verwijmeren)
17. Innovating the Finance programme: Financial methods and Techniques (Rogier Quaedvlieg, Patrick Verwijmeren)
18. Innovating the Finance Program: Master Thesis Preparation Course (Sjoerd van Bekkum, Patrick Verwijmeren)

**Projects effective in academic year 2017-2018**

19. Intensified Learning and feedback in quantitative methods (Pilar Garcia Gomez)
20. Professionalization of NLO challenges for excellent students (Kevin Dalmeijer, Patrick Groenen)
21. Introducing Eur Game App in Fiscale Economie (Rolph van Ovost)
22. Interactive learning in the course Applied Statistics 2 via Sowiso (Andreas Alfons)
23. Further Development "Formative assessment" (Quizzes) (Michel van der Wel)
24. Realising more individual feedback by introducing Autolab (Wilco van den Heuvel)
25. Introduction of a digital tool to facilitate peer to peer feedback and presenting assignments Bas Karreman, Omar Rickets)
26. Introducing the Eur Game App in the course Organisation and Strategy (Bas Karreman)
27. Intensification of the Financial Economics Master Programme 1 (Patrick Verwijmeren)
28. Intensification of the Financial Economics Master Programme 2 (Han Smit)
29. Improving interaction and selfstudy (Martijn van der Horst)
30. Goal setting experiment Econometrics (Erik Kole)
31. Practice makes Perfect; Introducing online excercises to practice bookkeeping skills (Jeroen Suijs)
32. Redesign tutorials Advanced Management Accounting (Ted Welten)
33. Improving Student Preparation (Laura Hering)

# Appendix 3: Application format

| | |
|---|---|
| Project name:<br>(give your project a name) | |
| Course(s) concerned (name and number: | |
| Bachelor or Master programme where the course(s) is offered | |
| Period, year and block: | |
| Estimated number of students: | |
| Person in charge of the project: | |
| Budget needed: | |
| Date: | |

| |
|---|
| **What challenge / problem / question does the project address?**<br>(Give a short description of the teaching situation and the challenge, problem or question you want to address) |
| Click here to enter text. |
| **How do you plan to solve this problem/ what are you going to do?**<br>(What educational improvement(s) / innovation(s) do you want to realise? Why did you choose this solution?) |
| |
| Click here to enter text. |
| **What is the intended outcome or objective of the improvement(s) / innovation(s)?**<br>(When is the improvement a success?) |
| Click here to enter text. |
| **What budget do you request?**<br>(Incidental means and structural means needed to realise your improvement, please specify hours and costs) |
| Click here to enter text. |
| **Planning/timeline**<br>(planning of activities, intended implementation date) |
| Click here to enter text. |
| **Evaluation of outcomes**<br>(How are you going to evaluate the results of your project and when) |
| Click here to enter text. |

# Appendix 4: Evaluation format

| | |
|---|---|
| Project name: | |
| Course(s) concerned (name and number: | |
| Bachelor or Master programme where the course(s) is offered | |
| Period, year and block: | |
| Number of students: | |
| Person in charge of the project: | |
| Budget granted: | |

**What challenge / problem / question did the project address?**
(Short description of the teaching situation and the challenge, problem or question you addressed)

Click here to enter text.

**How did you plan to solve this?**
(What educational improvement(s) / innovation(s) did you suggest in your proposal?
What was the intended outcome or objective of the improvement(s) / innovation(s)?)

Click here to enter text.

**What did you actually do?**
(Did you implement all improvement(s) / innovation(s)? If not, why not? Or if not exactly, what did you change and why?)

Click here to enter text.

**Results**
(What where the results of your actions? How did you measure the results of your improvement(s) / innovation(s)? Did you reach your objective / intended outcome? What feedback did you receive form students/ the student representative?)

Click here to enter text.

**What's next**
Do you continue the improvements/innovation next year? If not, why not?

| What will you change? What will you keep? What needs another test run? |
| --- |
| Click here to enter text. |
| **What actions are needed? By whom and when?**<br>What needs to be done/what conditions need to be met to continue next year? |
| Click here to enter text. |

# Appendix 5: Evaluations

## 1. Complete restyling of Marketing course introducing webcasts, interactive tutorials, digital books and more

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Marketing FEB11008 en deels ook FEB11008X |
| Bachelor or Master programme where the course(s) is offered | Bachelor 1 Economics & Business Economics |
| Period, year and block: | First year, block 4 |
| Number of students: | Ca. 700 |
| Person in charge of the project: | Yuri Peers, Vijay Hariharan, Bas Donkers |
| Approved Budget: | € 141.847 |

See for an extensive description and evaluation of this project the document "Evaluation of Mass-customized Learning"[8]. Some interesting conclusions:

- Students were mostly positive about the marketing plan assignment, Tutors had more concerns especially about the time they had to spend on feedback.
- Students liked the webcasts especially the fact they can watch webcasts whenever and where they want. They were more critical about the use of autocue and perceived the webcast sometimes as boring.
- Every webcasts is seen about 1,5 times the number of students.
- Making webcasts is very time consuming. 8 hours per webcast of 5-7 minutes.
- Students did not like the digital book. They prefer a printed book.
- Students did not use the possibility of on-demand Q&A sessions
- Students and TA's were not very enthusiastic about Project Campus. The lecturers were more positive since this enabled them to communicate directly to all students at the same time through one medium.
- Tutors were very happy with gradescope.

Next year we have to reconsider the use of project Campus because of the introduction of Canvas, the new LMS.

[8] Evaluation of "Mass-customized Learning" Innovation in the Marketing Couse Bachelor One, Bas Donkers, Vijay Hariharan, Yuri Peers, Marjolein Volkers, Michiel Slag.

## 2. Learning quantitative methods by doing

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Methoden en Technieken FEB12012<br>Methods and Techniques FEB12012X |
| Bachelor or Master programme where the course(s) is offered | Pre-master Fiscale Economie<br>bachelor 2: MrDrs programma; Fiscale Economie; Economie en Bedrijfseconomie<br><br>Pre-Master Economics and Business<br>bachelor 2: International Bachelor Economics and Business Economics |
| Period, year and block: | Second year, block 4 |
| Number of students: | 539+243 |
| Person in charge of the project: | Teresa Bago d'Uva, Tom Van Ourti |
| Approved Budget: | € 11.760 |

**What challenge / problem / question did the project address?**

In this course, students get acquainted with the toolbox for scientific economic research. The focus is on acquiring knowledge and skills useful for fundamental and applied research in both the public and the private sector. The complete cycle of scientific research will be discussed from research design, conceptual thinking to theory and application of cross-sectional and time series techniques, building upon the courses on Applied Statistics.

We develop the practical aspect of this course much further from what was the case until the academic year 14-15. Namely, by developing, completely anew, PC Labs, assignments, take-home assignments and tutorials, that span the whole duration and scope of the course. The practical aspect of the course is also further developed in renewed exercise lectures.

In order to get a good understanding of the methods taught in this course, it is crucial that students get their own hands-on experience with the application of them. We offer this experience for all methods and techniques taught, using the most commonly used software in applied economics – Stata - and large real life datasets. The goal is however not only to teach students "which buttons to press" but also importantly to know why they are doing that and to be able to interpret the results obtained. To address these broad goals, students have to answer a varied range of questions in several assignments based on results obtained in the PC labs, in take-home assignments and in tutorials.

**How did you plan to solve this?**

We tackle the abovementioned gap in the practical aspect of this course, which crucial for the understanding and consolidation of the theoretical material. The Stata software used is the most used in applied economics. The assignments are mainly based on real life large datasets extensively used by researchers. We are also able to draw from our successful experiences in teaching applied methods courses in the master programme.

Namely, we create:

- 6 new small scale PC labs - with introduction to the statistical software Stata and new statistical assignments using that software. The outcomes of these PC Labs are necessary for answering questions in subsequent small scale tutorials.
- 7 exercise lectures where the lecturers demonstrate the solutions of book assignments step by step using the software (and, in the first one, an extensive introduction to Stata is used). Student participation is encouraged by means questions based on/related to the book assignment using Shakespeak. Students are also encouraged to ask the lecturer for any further clarifications/software demonstrations.

- 3 new take-home assignments – students have to solve these on their own at home and the solutions obtained are used to answer questions in small scale tutorials. Additionally, there are question hours where students can ask a PhD student about doubts with the take-home assignments.
- 3 tutorials, where students need to use the results obtained in Stata in the take-home assignments and the PC labs to solve another assignment. This assignment consists of exam-like questions and teaching assistants provide explanations about the correct, and wrong answers.

All material, including the different datasets used, software instructions, questions of the several assignments and explanations for tutorials, was prepared completely anew by the lecturers.

**What did you actually do?**

We did exactly what we planned (see box "How did you plan to solve this"). We also added 3 questions sessions where students could discuss problems encountered while solving the take home assignment.

**Results**

Comments in student evaluations were positive regarding these innovations, noted the benefits for subsequent courses, and included suggestions that a similar approach be also adopted in preceding courses.

The reactions lectures of subsequent courses and seminars in the bachelor and master programmes, as well as thesis supervisors, are positive. For example, the coordinator of the Research Project noted that students of this first cohort were already better able to use the statistical software more independently and maturely and also more in command of critical concepts in economic analyses, like causality.

**What is next?**

We intend to keep updating the PC labs, tutorials and take home assignments every year. In addition, we intend to experiment with changing the question hours by a "guided tour" of the take-home assignment: instead of just expecting the students to pose their own questions, we show (in particular, our PhD student shows) them in the software Stata the steps that they need to take in the take-home assignment. So, it is more teaching intensive for us but also more informative for the students. Even so, the students still need to think for themselves about the interpretation of the results obtained because after a few days they have a tutorial in which they have to answer questions about those results (together with those of the PC Labs).

**What actions are needed? By whom and when?**

The basic structure is there, but updating the PC labs, tutorials and take home assignments is time intensive. Help from PhD students is organized.

## 3. Creation of supplementary digital practice material in Sowiso

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Toegepaste Statistiek 1/Applied Statistics 1 FEB 11005/FEB 11005X |
| Bachelor or Master programme where the course(s) is offered | Economics and Business Economics (NL and IBEB) |
| Period, year and block: | Block 4, BA-1 |
| Number of students: | Ca. 800 |
| Person in charge of the project: | Michel van de Velden |
| Date | 18-05-2017 |
| Approved Budget | 3.600,- |

**What challenge / problem / question did the project address?**

For a good understanding of Statistics students have to practice a lot and preferably during the course and not only in the week before the exam.

Maple Ta wordt ingezet als digitaal toetsinstrument met als doel studenten te stimuleren wekelijks met de leerstof bezig te zijn.
Iedere week wordt een toets aangeboden en het resultaat van alle toetsen telt voor 10% van het eindcijfer.
Studenten mogen een toets één keer oefenen, waarna vervolgens de toets gemaakt moest worden.
Het invoeren van tussentijdse toetsen is een beleidsmaatregel.
Maple Ta is gekozen, omdat het programma op dat moment de meeste functionaliteiten bood.

Het digitaal tussentijds toetsen kent een aantal nadelen:

- De docent is niet tevreden over het middelen van de deelcijfers [regressie naar het gemiddelde];
- Studenten wisselen online antwoorden met elkaar uit [free riding]

**How did you plan to solve this?**

Creation of supplementary digital practice material in SOWISO. Practice exercises and accompanying explanations must be created. The material should offer the students an additional tool that helps them to develop the skills needed to solve the tutorials exercises. Using the possibilities available in SOWISO and building on earlier experiences with MAPLE, material should be developed that not only provides exercise material but also helps students in solving exercises by pointing out solution strategies and/or by referencing relevant literature.

Sowiso is een elektronisch leeromgeving speciaal ontwikkeld om studenten te laten oefenen met opgaven van wiskundige aard.
Sowiso geeft studenten feedback op de uitwerking van opgaven. Daarnaast kunnen studenten om een hint vragen en biedt het programma voorbeelden en informatie over achterliggende theorieën
Sowiso biedt studenten gelegenheid om een diagnostische toets te laten maken. Hiermee verschuift de aandacht van het toetsen van de prestatie assessment of learning] naar inzicht in vordering van het eigen leerproces [assessment of learning];

Alternatieve oplossingen: (methodengebonden) software
Naast Sowiso zijn er meerdere aanbieders van elektronische wiskunde leeromgevingen.

- De uitgeverij van het leerboek (Freeman-Macmillan);
- ALEKS;
- Mobius (van dezelfde aanbieder als Maple Ta)

De docent heeft de leeromgeving van de uitgeverij niet uitgebreid bekeken. Volgens de docent was de leeromgeving niet eenvoudig te leren en vergde veel uitzoekwerk. Alternatieve aanbieders zoals Aleks of Mobius zijn niet onderzocht.

**What did you actually do?**

Sowiso is tijdens de pilot ingezet als oefenprogramma (ter vervaging van de huiswerkopdrachten).
Iedere student heeft een computerpracticum gevolgd waar zij opdrachten moesten maken. De opdrachten werden aangeboden in Sowiso. Op deze wijze raakten studenten direct bekend met het programma.

**Results**

- De docent is tevreden over het huidige ontwerp. Er is geen sprake van free riding meer. Daarbij krijgt hij positieve reacties van studenten;
- Studenten benoemen in de student evaluatie Sowiso als positieve kenmerk van de cursus. Zij geven aan de beschikbaarheid van oefenmateriaal erg prettig te vinden;
- Studenten waarderen de integratie van theorie en oefenopgave in een digitale omgeving;
- Studenten vinden Sowiso eenvoudig in gebruik. In Sowiso is een tutorial opgenomen, zodat studenten snel en simpel het programma leren gebruiken. In het computerpracticum zijn studenten niet vastgelopen.
- Sowiso werkt technisch probleemloos;
- Ondersteuning door Sowiso is goed
- In totaal hebben 917 unieke personen van Sowiso gebruikt gemaakt. Het gebruik verschilt per week. Gedurende het blok van zeven weken hebben gemiddeld 453 studenten per week van Sowiso gebruik gemaakt.

**What's next**
Do you continue the improvements/innovation next year?

Yes. Fine tune where necessary

Suggesties voor doorontwikkeling:

- Differentiatie in moeilijkheidsgraad. Op dit moment biedt Sowiso vooral iets 'extra's' voor de gemiddelde student of de student die moeite heeft met statistiek. Het programma biedt geen uitdagende opgaven voor studenten die meer verdieping willen.
- Gebruik learning analytics functie. In Sowiso kan per week, per student een overzicht genereerd worden van de voortgang. Daarbij maakt Sowiso door kleuren inzichtelijk welke opgaven door studenten veel fout gemaakt worden. Deze learning analytics functie biedt de mogelijkheid om het onderwijs in de tutorials beter te laten aansluiten op de leerbehoefte van de student.
- In het ontwerp ontbreekt een externe prikkel om wekelijks met de leerstof bezig te zijn. Studenten kunnen gemotiveerd worden door een het aanbod van een bonusopgave in de tutorial. De student kiest zelf of hij deze opgave wilt maken. De opgave telt mee voor het eindcijfer.

**What actions are needed? By whom and when?**

- Funding must be available and some assistance (less than this year) to improve and maintain. Projectplan schrijven voor extra funding t.l.v. innohub (actie course coördinator)
- Licentie Sowiso moet worden ingekocht (actie Innohub)

## 4. Introducing the use of "Formative assessment" (Quizzes)

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Econometrics 2 (NL and EN) FEB22005(X) |
| Bachelor or Master programme where the course(s) is offered | Bachelor Econometrics and Management Science (NL, EN, double-degree programme, pre-master NL and EN) |
| Period, year and block: | Bachelor 2, 2016/2017, block 4 |
| Number of students: | 169+91=270 (made exam) |
| Person in charge of the project: | Michel van der Wel |
| Date | May 12, 2017 |
| Approved Budget | 3.600,- |

**What challenge / problem / question did the project address?**

Development of pop quizzes. Addressed problem of keeping students motivated and on-track by stimulating to make exercises throughout the block. Previously done in groups of 4 and only graded 'on effort'. This makes free riding possible and there is little or no time for (individual) feedback.

**How did you plan to solve this?**

The idea was to introduce a system of individual digital quizzes. The student will receive individual feedback consisting of the number of correct answers and feedback where to find information about the incorrect answered subjects.

**What did you actually do?**

Yes, this was implemented. There were some small caveats such as limitations of Blackboard, but these were more implantation details.

**Results**

We were very positive with the results. On the soft-side, both the exercise lecturer and myself (main lecturer) noticed greater activity of the students early on in the block. On the harder-side, quizzes were made well, and on the course questionnaire students agreed the pop quizzes stimulated them to keep active and prepared them well for the exercise lecture.

**What's next**

I am very positive and ideally would like to do this next year. One concern is that the set-up is somewhat costly so support would be appreciated. Ideally in the same form of this year (extra TA), but perhaps in the long-run this activity should be embedded in more traditional TA role (as it takes away their grading and time safed is also on their side).

**What actions are needed? By whom and when?**

A first concrete action is to have clear funding possibilities for a TA for this activity next year. (action course coordinator)

## 5. Digitalizing the correction of handwritten exams with ANS Pilot 2

See no. 9

## 6. Autolab: Innovative Grading Tools for Programming Assignments

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Introduction to Programming (FEB21011), Programming (FEB22012), Advanced Programming (FEB23007), Multivariate Statistics (FEM21006), and others. |
| Bachelor or Master programme where the course(s) is offered | Bachelor Econometrics and operations research (NL and EN), BSc2 Econometrics/Economics, and Master Econometrics and Management Science |
| Period, year and block: | Multiple |
| Number of students: | Many |
| Person in charge of the project: | Gertjan van den Burg |
| Approved budget: | € 16.700 |

**What challenge / problem / question did the project address?**

In 2015 Gertjan van den Burg introduced the use of Autolab at the B2 Programming course for Econometrics students, in collaboration with Paul Bouman. Autolab allows instructors to create automatically graded programming assignments. Students are allowed to hand in assignments multiple times and get immediate feedback on their work, which enables them to quickly learn from their mistakes. It also allows the instructors to grade the programs of the students more thoroughly, since Autolab already tests if the programme functions correctly.

At the time, Autolab was not very easy to use, and required instructors to have basic knowledge of the Linux operating system. The aim of this project was to eliminate this requirement and make it as easy as possible for instructors to use Autolab in their course. This was motivated by the idea that Autolab is a valuable tool not only for programming courses, but also for courses on statistics, mathematical programming, and optimization.

**How did you plan to solve this?**

To make it as easy as possible for instructors to use Autolab, we had the following goals:

1. Create templates for automatically graded exercises that instructors can use to quickly and easily develop their own assignments for Autolab in different programming languages. Include extensive documentation and examples with these templates.
2. Improve the user experience of Autolab for instructors of ESE. This includes the ability to easily import students into Autolab from registrations in Sin-Online, creating a software tool which allows instructors to develop assessments on their own computer which automatically synchronize to Autolab, and writing extensive documentation for instructors on how to use Autolab with these tools.
3. Improve the student user experience by switching to a familiar domain name (autolab.ese.eur.nl), and fixing various bugs in Autolab.
4. Create tools for instructors to more easily manage plagiarism in programming assignments.

Additionally, to make sure that Autolab can be used in the future when Gertjan van den Burg is no longer at ESE, an extensive manual will be created on how Autolab is set up and how it can be maintained.

**What did you actually do?**

Of the deliverables presented in the project proposal we delivered everything we proposed, except for the following elements:

- The use of Single Sign On (SSO) in Autolab. Limitations at the IT department and the technical challenges of incorporating SSO authentication in Autolab proved to be too costly. Currently students only need to choose a password once to be able to use Autolab and this does not present enough of an inconvenience to warrant the extensive effort needed to implement SSO in Autolab.
- During the 2016 Programming course we experienced issues with some students not receiving confirmation emails to log in. We've updated Autolab to the latest version and have not been able to reproduce this problem. We therefore have not implemented any fix since we're not certain the problem still exists (or lies with Autolab).
- We did not create a manual for the Mossum tool, which allows instructors to create graphs of students with potential plagiarism. During the 2016 Programming course, this tool did not prove significantly useful and we don't recommend its use for other instructors. We did however create tools and manuals for instructors to more easily process plagiarism reports, as proposed.

**Results**

The project resulted in the following material:

1. Autograding frameworks for Matlab, Java, and R which allow instructors to very easily create automatically graded programming exercises for these languages. Additionally we included example exercises and extensive documentation for these frameworks.
2. Manual for instructors on how to use Autolab, specifically with regards to the autograding frameworks and Sin-Online.
3. Manual for how the Autolab server is set up. Since Autolab will be used by more courses in the future and the person who set up the Autolab server will not work at ESE in the future (PhD student), the technical documentation on how to maintain the Autolab installation and the related software tools have been written down in an extensive manual.
4. Various improvements to Autolab to make it easier to use at ESE.
5. Three software tools:
    a. SyncDaemon: a programme which synchronizes assignments between the Dropbox folder of an instructor and the Autolab webserver. This allows instructors to easily create assignments on their own computer, without requiring extensive knowledge of Autolab or Linux tools.
    b. MossScraper: The Moss plagiarism scanner reports plagiarism through online webpages which are deleted after two weeks. With this programme instructors can download the plagiarism results to be kept on their computer for further inspection and processing.
    c. MossReporter: With this tool instructors can easily create PDF reports from the plagiarism results. These results can be shared with students or the Exam Board for further processing.

All these materials are collected online at github.com/ErasmusUniversityAutolab . Because some of this material is sensitive (such as the autograding frameworks, which could theoretically give students too much knowledge on how exercises are graded), access to these tools and manuals is restricted. Currently Paul Bouman (bouman@ese.eur.nl), Rowan Hoogervorst (hoogervorst@ese.eur.nl) and Gertjan van den Burg (burg@ese.eur.nl) have access to these materials. Instructors that want to use Autolab can contact either of us and we can give them access as well. This may seem inefficient, but instructors who wish to use Autolab will have to contact either of us in any case to have a course created in Autolab (in the same way that an instructor can't create their own course on BlackBoard or Sin-Online).

**What's next**

In the future, Autolab at ESE will be maintained by Rowan Hoogervorst and Paul Bouman. Gertjan van den Burg will remain available for questions as a courtesy to ESE. The main goal for the future is to encourage other instructors to incorporate Autolab with their courses. Use of Autolab is not limited to programming courses, but can also be used in statistics or machine learning courses, or courses on mathematical

| |
|---|
| programming and optimization. Instructors may be hesitant to use Autolab because they're unfamiliar with it, but with the tools and manuals created in this project it should be very easy for them to start using Autolab. Executed properly, this can improve the quality of education for more students in the future. |
| **What actions are needed? By whom and when?** |
| No further actions are required other than motivating other instructors to use Autolab.<br><br>The projectteam QIP will provide information about autolab and the available manuals on the website www.eur.nl/ese/innovation_hub .<br><br>This investment is only successful if more teachers are going to use Autolab. |

## 7. Redesign B1 ICT courses; Introducing automatic grading and feedback/developing videos/include algorithmic thinking

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | ICT (FEB11013) and ICT (IBEB) (FEB11013X) |
| Bachelor or Master programme where the course(s) is offered | EB&B, IBEB |
| Period, year and block: | B1, block 2 |
| Number of students: | Ca. 1000 |
| Person in charge of the project: | Paul Bouman |
| Approved Budget | € 37.355 |

**What challenge / problem / question did the project address?**

Excel has become one of the most widely used pieces of software by almost everyone who professionally works with quantitative data. As a result, it is important for students in economics that they master this software package.
A traditional Excel course as it existed in the 2000's and is still being taught today is not in the best interest of the students. Instead of checking whether they can produce a spreadsheet that is able to answer a single question, a modern course should check whether the way their spreadsheets are implemented is according to best conduct and whether it is able to handle different questions with the same computations and structure.

Unfortunately, it is impossible to manually check and grade all the spreadsheets produced by the students because of the high number of students.

Finally, we have some indications that the importance of spreadsheets could be decreasing in the Big Data world. As a consequence of this, it is not very clear to which extent the typical programming environment of Excel, Visual Basic for Applications, is a future proof technology. As a result, we believe that algorithmic thinking is becoming an important skill for students.

**How did you plan to solve this?**

1. The first goal of the proposed project was to implement an autograding / fast feedback system to check spreadsheets made by the students in the ICT course.
   A nice-to-have feature of the resulting system would be a peer-review option for students to have a look at the spread sheets of each other and let them peer review their sheets.
2. The second goal of the proposed project is to create a library of videos that explain the various techniques and link these to assignments the students can make to practice their skills.
3. We believe that algorithmic thinking is becoming an important skill for students. The final goal of the proposed project is to include algorithmic thinking in the course.

**What did you actually do?**

1. An semi-autograding system has been realised. Semi, because the system still asks for several manual interventions to make it work. But it is now possible to correct all the assignments in a reasonable timeframe. This allows the tutors to focus more on helping students and spend less time on checking the work, increasing the efficiency of the student assistents. The system is based on the open source and free Apache POI library, as it is very difficult to have a server side version of Excel. The disadvantage of Apache POI is that it does not support all the functions and functionality of Excel and thus some things still have to be checked manually. Development of assignments is relatively straightforward: a reference Excel sheet is required that contains the correct solution, and an .xml file which specifies which cells need to be compared, possibly based on changes in other cells.

In the course students now have 4 computerized tests. (weeks 2, 4, 6 and 8). The testing was performed without an online system: students had to fill in their answers in an Excel sheets (which can be considered as a digital equivalent of an answer form). All Excel sheets were collected and processed by a tool that allows us to give points to each unique answer that was produced by the students.

2. The library of videos has been realised. Before the course consisted of lectures which were used to explain how to work with Excel and Access. Now the lectures are replaced by videos, which explain the workings of Excel and Access, and tutorials to practice in smaller groups.

   The TA's have done most of the work for the part of the course that was about Excel. The professor did record a one hour online lecture about general computer skills and he made a playlist in Youtube consisting of videos with background information.

   This proved to be a bit confusing for students: what is essential information for the exam, how do I study, how do I extract important information from a video? Since it is a lot of theoretical knowledge, student might prefer a more traditional way of teaching including a textbook and lectures. Videos are very useful in explaining this type of material, but it's not ideal to use a lot of video material during a lecture. A right balance should be found. Also, the videos cover a lot of different topics; there was no clear structure. Furthermore, many students simply performed the tasks, but did not know why they did what they did. We should pay more attention to the relevance and the goal of the course.

3. To stimulate algorithmic thinking 2 weeks in the programme are used to work with Google Blockly. Some students were enthusiastic about working with Google Blockly, others simply performed the tasks. We should pay more attention to why we think this is relevant knowledge. The advantage of Google Blockly is that it takes the burden to learn syntax away from the students: they can focus on composition of steps, conditional execution and iteration instead of struggling with getting every parenthesis or semicolon right. However, it looks relatively childish and is not something that is used "in practice". As a result, it is difficult to explain to students why it is useful to learn this. Maybe this can be improved by changing the exercises a bit. The time to teach algorithmic thinking is still relatively short within the course, so the discussion about algorithmic thinking is probably not finished.

**Results**

See before. The automated grading tool was highly appreciated by the student assistants.

**What's next**

Students learn a lot of new concepts in a very short time, which can be overwhelming. Now we teach Blockly for two weeks, and then Excel for two weeks. It might be interesting to integrate this a bit in order to facilitate the learning process.

We should be able to show the relevance of Blockly, perhaps by creating a market simulation game and make a small competition. Students should understand why they do what they do. But also, we should not forget that it is a course for economists. Most student will end up in business and not in academics. For businesses, excel skills are highly valuated.

The automated grading tool was highly appreciated by the student assistants and it makes sense to keep using it.

**What actions are needed? By whom and when?**

**T**he videos are compiled in a playlist on Youtube. Here it is not possible to ask questions, which is possible in MOOCs. It could be interesting to offer student the possibility to do a small exercise during the video, and that they can only continue if they got the right answer. If not, they can look the first part of the video again. A possible disadvantage is that student might focus only on certain parts of the video. But it's beneficial for student to actively make an assignment, to click on buttons themselves. This works better than passively listening. We are interested to incorporate this aspect in the following years, but it is at the moment a bit uncertain how this can be done with the technology at hand; further development would be a possibility.

TAs should receive instructions on time, which could be partially solved by the fact that next year the (some) TAs will have experienced the course as a student themselves. The fact that Paul Bouman and Kim Schouten now have experience with the course will help in the coming year.

The way that videos are integrated should be improved, and student should be better informed what the exact relevance of the videos is: which ones show essential information, which ones are for background knowledge?

Since many student simply perform the task they have to do, it is important to explain why this course is relevant. A solution for this might be to give the students more applied tasks, such as a market simulation.

From the above points it is clear that there is still enough to be developed. We are considering to hire student assistants that can help with some of these developments and preparations. The fact that Paul Bouman will defend his PhD thesis in June also takes some burden away.

## 8. Introducing Tutorials in Economics of Organisations, Game Theory, Industrial Organisations

Master intensification

| **Project details** | |
|---|---|
| Course(s) concerned: | FEM11037 Economics of Organisations (block 1)<br>FEM 11056 Game Theory (block 2)<br>FEM 11038 Industrial Organisation (block 2) |
| Programme: | Master programme EMO (Economics of Management and Organisation) |
| Period: | 2016-2017, block 1-2 |
| Number of students: | FEM 11056 De facto: 149 subscribed, 85 took the final exam, 56 passed<br>FEM11037: 72 students subscribed, 56 took the exam, passing rate 80%.<br>FEM 11038: Subscribed 109, 86 took the final exam, 57 passed. |
| Person in charge of the course: | Josse Delfgauw FEM11037<br>Vladimir Karamychev FEM 11056<br>Dana Sisak FEM 11038 |
| Approved Budget: | € 7.500 incidental costs, € 24.414 structural costs period 2016-2019 if pilot successful |

**What challenge / problem / question did the project address?**

**JD**: Tutorial lessons were given in rather larger groups (60 – 100 students) for several courses including Economics of Organisations. Small-scale tutorials are likely more effective

**VK:** Game theory (FEM11056) has always been a difficult course, with a passing rate of about 65-75% on final exam. "Intensifying Master Courses" project was supposed to improve the passing rate, and the overall quality of the course.

**DS**: Industrial Organisation is a relatively mathematical course. Students are very heterogeneous in their analytical skills, some of them need a lot of support. Small scale tutorials were intended to improve the opportunities for especially the weaker students to get support with their deficiencies and get a more personal treatment.

**How did we plan to solve this?**

**JD**: Organize parallel tutorial groups, and provide funding for this. We hoped to increase the effectiveness of the tutorials.

**VK:** Course lectures (3 hours per week) are accompanied by tutorial sessions (2 hours per week). The proposal was to split the students into two tutorial group, to intensify tutorials thereby increasing the quality of the course, grades, and the passing rate.

DS: Have two tutorials instead of one, so students get a more personal treatment and have more opportunities to ask questions.

**What did we actually do?**

**JD**: We did as planned. Zara Sharif lectured the tutorials.

**VK:** Two tutorial groups have been formed, students subscribed to both evenly. Teaching assistant (ms. Zara Sharif) has been giving tutorials twice, once for each tutorial group. On week 5 of the block, Zara Sharif reported that student attendance for group 2 (EBA2) had decreased to zero, because of inconvenient scheduling (group 2 had tutorials on Friday 16:00-17:45, which was considered too late).

**DS:** Zara Sharif taught two groups instead of previously having one big session.

**Results**

**JD**: Hard to pin down the exact effects (on grades / passing rates for example).
My impression is that the average student did perform better on the exam on the topics covered in the tutorials.
Students rated Zara very well (3.95 on the evaluation, which is high for a first-time tutor in this course).
Anecdotally, students told me they liked the small scale, as it allowed them to ask more questions. Some students said they went to both sessions, so as to get an even better grasp on the material.

**VK:** No clear results have been observed, average grade is 6.2 and the passing rate is 66%. This outcome is comparable with previous years.
The main feedback from the students was that the tutorials should have been scheduled at an earlier time. Perhaps, this is what should be done next year.

**DS:** Overall, my conclusion is that the small-group approach is promising, though we had some starting difficulties which are also reflected in the relatively weak evaluation of the course this year.
First of all, instead of taking only one tutorial, some students decided to go to both, as they really needed the extra support (the course is quite technical, which most students struggle with). What then happened, as I heard from Zara and also from students personally, is that Zara was unsure about one of the problems in the first tutorial. This was then fixed in the second one, and thus this one went a lot better.
Unfortunately students who went to both tutorials got upset by this "unequal treatment" (they even complained to me personally) and this is clearly visible in the evaluation. I know Zara as a very reliable and talented teacher and thus I am sure that in a future edition of the course, this will not happen again.
Finally, I have talked to some students personally now about the small-scale tutorials and they clearly were in favor of this change. Firstly they felt that they can ask more questions and get a more personal treatment in the smaller groups. Secondly they like the opportunity to visit a second tutorial when they find the material very challenging

**What's next**

**JD**: I want to continue this approach next year.

**VK:** If possible, a better schedule should be done next academic year (2017-18). Then, the results will be more pronounced.

**DS:** I would personally like to see the small-scale tutorials continuing.

**What actions are needed? By whom and when?**

**JD**: Probably this would need structural funding. Which would make sense in the light of our desire to provide small-scaled education, also in the masters.

**VK:** Making an explicit request to the roster coordinator is sufficient. The course coordinator (V. Karamychev) is in charge of this solution

**DS**: No actions mentioned.

## 9. Digitalizing the correction of handwritten exams with ANS Pilot 1

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | Non-linear Optimisation (Pilot 1)<br>Successiewet (Pilot 2) |
| Bachelor or Master programme where the course(s) is offered | Bachelor 2, Econometrics (Pilot 1)<br>Bachelor 3, Fiscale Economie (Pilot 2) |
| Period, year and block: | 2016-2017, block 2 (Pilot 1)<br>2016-2017, block 4 (Pilot 2) |
| Person in charge of the project: | Kevin Dalmeijer (Pilot 1)<br>Theo Hoogwout (Pilot 2) |
| Budget | 1 000,- |
| Number of students: | 250 |

**What challenge / problem / question did the project address?**

- Grading handwritten exams with open questions is a time and labour consuming task;
- Grading with more than one teacher or SA is difficult to organise
- It's a lot of work to adjust the grading norms in the end, because every exam has to be checked manually and possibly adjusted;
- It is not efficient how SA's currently approach teachers when they are not sure how to grade a certain question

In pilot 1 the Ans tool has been tested. In pilot 2 some adjustments have been made and tested.

**How did you plan to solve this?**

A digital tool might be a solution for these bottlenecks. . The completed exams are scanned and loaded in a computer program. Then, the teacher can digitally grade the exam. There are currently two providers known to us: Gradescope and ANS Delft.
The course Marketing has positive experiences with Gradescope. Because Gradescope is an American provider working with American servers, there is uncertainty if Gradescope meets our requirements concerning laws on protection of personal data.

Therefore, we decided to run two pilots with ANS. If the pilots are successful, the tool might be used for other courses as well.

The aim of the pilots is to investigate if digital grading (paper-to-scan method) with ANS can be a solution to the previously stated problems that SA's and teachers currently experience when grading exams manually.

**What did you actually do?**

We hebben de pilot bij Niet lineair optimaliseren uitgevoerd zoals hiervoor omschreven. De pilot bij fiscale economie is deels uitgevoerd. De betrokken docent heeft het programma uiteindelijk niet gebruikt. Wel is tijdens deze pilot een verbeterde scan procedure uitgetest.

**Results**

Nakijktijd korter

- De betrokken docent geeft aan dat het nakijken met ANS sneller verloopt. De totale nakijktijd bedraagt iets meer dan 80 uur voor een docent en twee student-assistenten. Dit is vergelijkbaar met de nakijktijd van het voorgaande jaar. Echter, waren er dit jaar 40% meer studenten.

Meer gemak

- De betrokken docent ervaart gemak bij het nakijken van tentamens met ANS. Het toekennen van een score aan een antwoord verloopt soepel en snel. Verder hoeft de docent niet meer door stapels papier te bladeren en hoeft hij niet meer met papier te sjouwen.
- Ans onthoudt waar je gebleven bent met nakijken. Dat is erg handig.

Plaats onafhankelijk beoordelen met meerdere beoordelaren

- Het nakijken met meerdere personen is eenvoudig te organiseren in ANS. Aan iedere beoordelaar kunnen specifieke vragen worden toegewezen.
- Ans maakt het mogelijk om tijd- en plaats onafhankelijk met meerdere beoordelaren antwoorden uit hetzelfde tentamen te beoordelen.

Beoordelingsproces eenvoudiger

- Communicatie tussen meerdere beoordelaren wordt door ANS eenvoudiger gemaakt. Ans maakt het mogelijk voor de student-assistent/docent om bij twijfel een 'vlaggetje' te plaatsen bij het gegeven antwoord. De verantwoordelijk docent kan op een later moment naar het antwoord kijken en een definitieve beoordeling geven. In de pilot zijn in totaal 100 vlaggetjes geplaatst door sa. Bij het plaatsen van een vlaggetje deed de student-assistent al een suggestie voor de beoordeling. In 90 van de 100 gevallen heeft de docent de suggestie van de student-assistent overgenomen. De docent had de indruk dat student-assistenten sneller het contact zochten met de hem, wanneer zij over een antwoord twijfelden.

Kwaliteit van beoordeling verhoogd

- Student-assistenten konden vijf 'voorbeeld' beoordelingen van de docent zien in ANS. Op deze wijze verkregen de student-assistenten inzicht in de manier waarop de docent een antwoord beoordeelde.
- Zie beoordelingsproces. Het is voor student-assistenten eenvoudig om twijfelgevallen kenbaar te maken.

Gebruikersvriendelijk programma

- Ans werkt intuïtief en is daardoor eenvoudig te leren. De betrokken docent heeft in totaal ongeveer 1 uur besteed aan het aanmaken van het tentamen in ANS.
-

Huidige ICT-infrastructuur is knelpunt

De huidige ict-infrastructuur in het H-gebouw is niet ingericht voor het scannen van grote volumes papier. Dat leidde tot een aantal knelpunten:

- Het scannen van tentamens verliep zeer traag. Het scannen van de antwoordbladen (10.000 pagina's) door de docent en twee student-assistenten nam drie werkdagen (24 uur) in beslag;
- Het scanapparaat verstuurt bestanden naar een emailaccount. De mailbox raakt echter snel 'vol'.
- Het scanproces is foutgevoelig. Het scanapparaat scant kleine hoeveelheden per keer. Het vraagt veel tijd en aandacht om te controleren of alle papieren zijn gescand. Ook bij het verwerken van de grote hoeveelheden e-mails treedt een vergelijkbare foutgevoeligheid op.

Examenadministratie

- Surveillanten. Voor de surveillanten is een instructie gemaakt. Surveillanten gaven aan dat zij het fijn vinden dat zij tentamens niet meer hoeven te sorteren. Ans herkent immers ieder blad dankzij de QR-code.
- Printservice. Ieder tentamenblad is uniek en moet apart worden afgedrukt. Het is voor de drukker geen probleem gebleken om losse bestanden te printen.

Ervaringen studenten neutraal

- Studenten zijn in het hoorcollege geïnformeerd over de veranderende wijze van afname. Studenten staan niet positief, noch negatief tegenover het werken met ANS
- Studenten moeten het antwoord noteren in een antwoordblok. We hebben van studenten hier geen klachten over ontvangen.

Digitale tentameninzage goed te organiseren

- Ans maakt het mogelijk om tentamens op afstand te laten inzien door studenten. De docent heeft ervoor gekozen om de inzage op de campus te organiseren. Dit om te voorkomen dat studenten vragen kopiëren en verspreiden. De studenten kregen bij aanvang een tijdelijk account. De digitale inzage is voor studenten en de docent naar tevredenheid verlopen.

Dienstverlening leverancier

- Ans is een betrouwbare en professionele partner gebleken. Vragen en/of problemen zijn snel opgepakt. Ans handelt proactief. Zij kunnen zien wanneer zich fout voordoet in het systeem. Vaak was Ans al bezig met het verhelpen van het probleem, voordat de docent het probleem had opgemerkt.

Functionaliteiten ANS
Gedurende de pilot zijn op verzoek van de docent een aantal functionaliteiten toegevoegd:

- Het mogelijk om via een zoekscherm op studentnummer te zoeken;
- Het is mogelijk om punten af te trekken, wanneer de student in zijn antwoord fouten maakt.

In het kader van pilot 2 is inmiddels een test uitgevoerd met een productiescanner.
Het gebruik van de productiescanner levert aanzienlijke tijdswinst op. Tijdens de test zijn 3300 pagina's gescand in ongeveer een uur tijd. Hierbij dient opgemerkt te worden dat de tentamens al van nietjes waren ontdaan. Het verwerken van het gehele tentamen met de productiescanner zou ongeveer 6 uur kosten voor een persoon.
Het scanproces is veel minder foutgevoelig. De scanner verwerkt grote hoeveelheden papier in een keer en detecteert zeer goed wanneer een pagina niet goed is verwerkt. De scanner verstuurt de bestanden naar een shared folder. Er kunnen dus geen e-mails meer zoekraken.
Tevens is een oplossing gevonden voor het handmatig verwijderen van de voorbladen door het invoeren van een scan mij niet barcode.

Er is informeel contact geweest met leden van de examencommissie. Zij hebben positief gereageerd.

**What's next/ What actions are needed? By whom and when?**

In overleg met de coördinator van de examenadministratie moet een procesbeschrijving worden opgesteld. Dit wordt opgepakt door het Innovation Hub team.

Het verdient de aanbeveling om te onderzoeken of vanuit het Educational Service Centre een dienst ingericht kan worden die het scannen van tentamens gaat ondersteunen. Verder zou de dienst ook het aanmaken van tentamens in ANS kunnen omvatten. Dit is inmiddels opgepakt door het Innovation Hub team.

Als we door gaan met ANS moet een licentie worden aangeschaft. (NB dit is dus gerealiseerd).
Formeel afstemmen met de examencommissie indien besloten wordt om ANS op grotere schaal In te gaan zetten.

## 10. Developing online modules for background knowledge

Innovation Hub project

| | |
|---|---|
| Course(s) concerned: | Introduction to Statistics, Introduction to Analysis |
| Programme: | Bachelor 1, Econometrics |
| Period: | Block 1, 2016 - 2017 |
| Estimated number of students: | 250 |
| Person in charge of the project: | Dr. Christiaan Hey & Dr. Emöke Oldenkamp |
| Approved Budget: | € 2.787 |

**What challenge / problem / question did the project address?**

In block 1, we wish to support students who experience a lack of basic mathematical skills.

**How did we plan to solve this?**

Guided by the project leader, a TA will compile modules of relatively simple training exercises with answers on a range of topics that students should in principle master from their high school math courses. No lectures are provided on these topics, and questions and solutions are made available online.
Students can select modules by themselves to train topics that they find difficult. The offered material is the same for both streams (Dutch and international).
Because of the very limited preparation time, the material at first is offered via Blackboard. An option for later years is to develop webcast solutions.

**What did we actually do?**

We offered an extra week-by-week exercise package for students to help them improve their mathematical background. Questions about the solutions, solution method and related theory could be asked through Discussion Board and a weekly walk-in question hour, separately for the Dutch and the International groups. The students were asked to take personal action to establish whether they lacked any knowledge by scanning the package of exercises weekly.

**Results**

A handful of students did regularly visit the question times, or even did more than the recommended exercises, however, not all students grabbed this additional helping hand. This year the mathematical background of especially the Dutch students (also the Dutch students participating in the International group) is quite weak, we could have expected many more students seeking help.

**What's next**

This year the training material has been provided as in worddocuments, next year there will also be pencasts (little video's made with the livescribe pen). See for more information about this tool https://www.livescribe.com/en-us/.

**What actions are needed? By whom and when?**

The teachers involved have to make pencasts to use next year. Emoke Oldenkamp has been introduced to this new tool.

## 11. Development and moderation of discussion forums on Blackboard

Innovation Hub project

| | |
|---|---|
| Course(s) concerned: | Introduction to Statistics, Introduction to Analysis |
| Programme: | Bachelor 1, Econometrics |
| Period: | Block 1, 2016 - 2017 |
| Estimated number of students: | 250 |
| Person in charge of the project: | Dr. Christiaan Hey & Dr. Emöke Oldenkamp |
| Approved Budget: | € 14.579 |

**What challenge / problem / question did the project address?**

In all of our four courses in blocks 1-3 (Introduction to Analysis, Introduction to Statistics, Matrix Algebra, and Analysis), students have to spend many more hours in studying outside the classroom than in previous years. We want to stimulate the active involvement of students with the discussed topics and with fellow students.

**How did we plan to solve this?**

To stimulate their active involvement, we wish to experiment with discussion forums where students can pose their questions and fellow students can provide and discuss answers, moderated by TA's. Discussion topics will also be sparked every week by some introductory and some challenging questions developed by staff and posted by the TA's. The forums will be organized per course and per stream (with separate forums for Dutch and international streams), and also per topic per course to organize the discussions. Further, as students are new to our programme in block 1, they tend to have many practical questions in the first block, and we propose to install also a forum on practical matters in block 1 where we can guide students to find their way at the EUR, in the ESE, and in all organizational (not content related) aspects of our courses.

**What did we actually do?**

We offered our students discussion forums organized per course and per week and with an additional forum for practical and organizational questions. We posted some (anonymous) teaser questions to stimulate the discussions.

**Results**

Participation on the forums varied per course and per week and was not high, about 10 percent. The maximum number of participants on a forum per week is about 20 in the Dutch group (of around 250 students) and about 10 in the International group (of around 110 students). Some students have been very active and constructive in answering questions.

Discussions with students and meetings with student representatives provided the following information:

- Students are a bit afraid of the forum, because they do not want to pose "silly" questions or give "wrong" answers, even though submissions may be made anonymously.
- Students have their own channels to exchange questions, in particular Whatsapp groups and Facebook.

An additional point of attention mentioned by students is that they are not accustomed to being responsible themselves to collect study information. Therefore many students miss the information on Blackboard (including the Discussion Forum) as well as other offered tools such as webcasts, notwithstanding regular announcements during lectures and in study guides. It seems that modern students expect to be pushed by mobile alerts to tell them what activities to perform.

Reactions of students and teaching assistants further suggest that online Q&A sessions that run via the discussion forum would attract more interest than the current format that has longer waiting times and where interaction is relatively slow.

| **What's next** |
| --- |
| We advise to incorporate regular online Q&A sessions where questions are answered on the spot. We further advise to incorporate discussion forums and other learning tools such as webcasts into an integrated system in the form of, for example, an ESE app for mobile phone that alerts students on a regular (perhaps even daily) basis on what to do. The app could send brief alert messages with links to ESE sites for announcements, discussion forums, webcasts, time tables, and other study related information. If possible, it would be particularly attractive if the app shows the student how far he or she is in completing the tasks of the day or week.<br><br>Next year the use of the discussion forum will be repeated. |
| **What actions are needed? By whom and when?** |
| We hope that the features (see what's next) will become available in the new Learning Management System, on which the EUR will soon take a decision. An important ICT innovation project is to devise a tailored system for our students that provides them with one (preferably personalized) central channel that integrates all communication channels and study tools. |

## 12. Less instruction more active learning (redesign and introducing peer review)

Innovation Hub project

| | |
|---|---|
| Course(s) concerned: | FEM11008 Asset Pricing<br>FEM21003 Asset Pricing (QF variant) |
| Programme: | MA Economics & Business Economics<br>MA Econometrics & Management Science |
| Period: | MA, block 1 |
| Estimated number of students: | 180 |
| Person in charge of the project: | Erik Kole |
| Approved Budget: | € 6.489 |

**What challenge / problem / question did the project address?**

Students focussed too much on the details of theory and methods that are taught in this course, but failed to make the connection between theory and methods. Students also complained that they did not really understand the relevance of the course.

**How did we plan to solve this?**

1. Redesign of the assignment to make it cover a larger part of the material (theory and methods).
2. Redesign of the assignment with a stronger focus on implications and interpretation.
3. Peer review in the assignment to enhance learning and make it more active.
4. Devote part of the lectures to students' working on and discussing about exercises or the assignment.

**Desired outcomes**

A. Students should become better at combining the theory and methodology of the course.
B. Students should enjoy the course more. At the moment, the course is perceived as rather dry with lots of economic theory. Having students formulate their own model based on theory, and then testing it, should stimulate their learning and make it more interesting.

**What did we actually do?**

1. The assignment now focuses on
    a. Efficient portfolios and (testing) their pricing implications;
    b. Creation of factor portfolios
    c. Fama-MacBeth analysis of characteristics
    d. Cross-sectional asset pricing test

    Most of these parts are new, in particular a and c.
2. Students had to hand their results in the form of a small paper / report. In the previous version they handed in an Excel file with answers, with a small document for the answers to open questions.
3. Students had to hand in intermediate versions of their report twice for peer review. Peer review was organized via Blackboard.
4. Not implemented. The lectures were quite full, and could not include time for students to work on and discuss about exercises. Instead I used Shakespeak to activate students.

**Results**

Intended outcomes are realized

A. Students scored better on the exam than previous years, and demonstrated good understanding in the papers.
B. Students evaluated the course better than in previous years. However, there is still room for improvement here.

Side result

- Students studied more regularly for the course than other years. Fewer questions about the first lectures during the last ones.

Discussion with student representatives can be beneficial.

**What's next**

I plan to use the same design next year with some refinements in the assignment.

The correction of the assignment is a lot of work now. This year 90 papers of 12-15 pages had to be graded. In combination with 160 exams, this is quite demanding. It would be good to reduce the length of the exam.

**What actions are needed? By whom and when?**

- Discuss whether shorter exams are possible (examination board).
- Support by a TA to make sure that the peer review runs smoothly (determined by department chair).
- Non-Dutch students in Economics and Business Economics have little skill in preparing reports. Some references /videos/ training would be beneficial for them.

## 13. Boosting the Social Intelligence of Students in the Marketing Master Program

Innovation Hub project

| | |
|---|---|
| Course(s) concerned: | Sales and Account Management (FEM11142) |
| Programme: | Marketing Master Program |
| Period: | Block 1 |
| Estimated number of students: | 106 |
| Person in charge of the project: | Professor Willem Verbeke |
| Approved Budget: | € 17.000 |

**What challenge / problem / question did the project address?**

When entering the job market, some 60% of students in marketing (and business economics) at ESE take up positions in sales / knowledge brokering. Knowledge brokering requires that the student possesses both IQ and SQ. Assuming that all of our students have a high IQ, a core task in this course is to improve their SQ. Boosting students' SQ however is an intensive enterprise requiring that students individually and in teams will be approached as well as be motivated to show more engagement during classes. Therefore this course will introduce various innovations that are designed to boost SQ.

**How did we plan to solve this?**

There were 3 (clusters of) innovations:

*Incentives to spur creativity and engagement in the class*
Money (up to 100 euro) can be earned in class; each time a student asks an intelligent question he can earn 10 Euro.

*Guest lecturers*
The professor wanted to invite 3 quests to give (part of a) lecture.

- A very successful alumnus to share his story
- Salesforce.com to share the latest developments in IT and how they are changing the way salespeople interact with customers.
- Frisse blikken, to facilitate a management game and to provide feedback on team work

*Game to profile yourself to become better team players*
A management game facilitated by Frisse Blikken, in which students discover the degree to which they are resilient against social stress, learn to work together, learn how they can cope with stress and deal with defeat versus winning. Students can also participate (with explicit consent) in a test that gauges their testosterone levels, cortisol levels and other hormones.

The intended outcomes of these innovations are:

- better developed soft skills
- making students more successful in gaining placement in the market place
- raise the number of students who seek to pursue the marketing master or marketing accent in behavioral economics

Evaluation method: Sin-online and focus group discussions

**What did we actually do?**

All 3 innovations were implemented as described above.
The first innovation was funded by the professor himself, for the budget was forgotten in the project application.

The evaluation was not done by Sin-online or a focus group, but with an online questionnaire in Qualtrics at the end of November. This questionnaire included 9 statements that could be answered with 1. Totally disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Totally agree. In total, 32 students responded to this questionnaire (about 30%). Below you find the 9 statements.

Q1. The ability to earn money by asking good questions in class excited me and motivated me to think better about what is being said during class.
Q2. The dynamics of the interaction student-professor during class make it easier for me to study my exam and answer the exam questions.
Q3. The lecture of Harald Swinkels was interesting to me and it allows me to better imagine what it means to be entrepreneurial in my life.
Q4. The information about my attachment styles score and genetic makeup was interesting and allows me to understand who I am and why I undertake certain social actions above others.
Q5. When doing interviewing for a job I will be more creative in how to talk to recruiters; that is I will sell myself better.
Q6. When working in a company and my boss tells me to sell a new product to customers I will do this without feeling embarrassed.
Q7. The lecture of salesforce.com opened my eyes how Internet affects the way sales people operate these days.
Q8. I recommend other students to take the class from professor Verbeke because he stimulated me to think differently about who I am and what I will do in my career.
Q9. Compared to most classes I took, the class of professor Verbeke was very stimulating and joyful.

**Results**

*Incentives to spur creativity and engagement in the class*
The answers of Q1 show that for 56% of the respondents, the incentives were motivating to think better about what is being said during class. For a small group (13%) this was not the case.
The answers of Q2 show that 66% agrees that the dynamics of the interaction student-professor during class make it easier to study for the exam and to answer the exam questions, whereas only 9% disagreed. If these dynamics are improved by the incentives, was not asked in the questionnaire.
**Overall, the experience using incentives to ask meaningful questions is positive.**

*Guest lecturers*
The majority (69%) of the respondents agreed that the guest lecture of Harry Swinkels was interesting. Only 9% disagreed with this statement.
Almost half of the respondents agreed that the lecture of salesforce.com opened their eyes how Internet affects the way sales people operate these days. About one third disagreed with this statement and 22% was neutral.
**Overall, students were mostly positive about external speakers**.
In this course, 2,5 out of 7 lectures where facilitated by external speakers. The professor experienced this as the maximum number of guest lectures possible in order to keep guard of the common theme.

*Game to profile yourself to become better team players*
**The professor experienced that the students were very enthusiastic about the game.** Students were not asked about this management game by Frisse Blikken in the questionnaire. The questionnaire did ask about the attachment style score and the biological test. Most respondents (75%) agreed that this information was interesting and allows them to understand who they are and why they undertake certain social actions above others. Only 13% disagreed with this statement.

*Did we reach the intended outcomes?*
It was not measured if these interventions lead to better developed soft skills.
If students will be more successful in gaining placement in the market place, **remains to be seen**. Of the respondents, 72% agrees that they will be more creative in how to talk to recruiters in job interviews. This suggests that at least students feel more comfortable in doing job interviews.
If the number of students who seek to pursue the marketing master or marketing accent in behavioral economics will increase, can be measured in the coming years. The respondents of the questionnaire were in general positive about the class of professor Verbeke as was asked in question 8 and 9.

**What's next**

*Incentives*

Continue using this incentives.

*Guest lectures*
Continue using guest lectures. Things to consider:

- Limit the number of external speakers, for you need to guard the common theme in your course.
- Include an exam question about guest lectures, so students feel the need to take the content seriously.
- Speaker fees help to find the relevant guest speakers (2.000 to 3.000 euro).

*The management game, combined with a biological test*
Continue a game like this, but possibly another game. The game of this year was a bit expensive. Other games are explored for next year. The biological test is made available by the professor himself (it is his product), the analysis is done by a laboratory in Utrecht. Results from the test will be given to the students in 5 weeks after they played the management game. The professor seeks to shorten this period between playing the game and receiving the test results.

For next year, there is a budget of 7.000 Euro available to continue this innovation.

**What actions are needed? By whom and when?**

None are mentioned

## 14. Advancing the Statistical Knowledge of Marketing Master's Students

Master intensification

| | |
|---|---|
| Course(s) concerned: | Marketing Research and Analysis, FEM11027 |
| Programme: | Master Economics and Business |
| Period: | Block 1 |
| Estimated number of students: | 100-120 |
| Person in charge of the project: | Dr. Vijay Hariharan |
| Approved Budget: | € 17 272 (2017-2019) |

**What challenge / problem / question did the project address?**

In this course there were tutorials about applying statistical technique in SPSS for 50 to 60 students, led by the course coordinator and a PhD student. In the tutorials, there were too many questions for the teachers to answer. There was also no time to provide feedback on the weekly individual assignments. So the challenge was to change this for the better.

**How did we plan to solve this?**

The proposal was to create smaller groups for the tutorials in order to provide ample opportunities and increased comfort zone to ask questions. We also wanted to hire student assistants (SAs) to help with the tutorial sessions. Specifically, the SAs can provide individual feedback on weekly assignments and guide the students on the weekly progress of their group project. In addition, the SAs can coach students with limited or no statistical background to get familiarized with basics of statistics and the basics of the statistical tool used in this course (SPSS).

The intended outcome is to:

1. Provide additional assistance during tutorial sessions.
2. Provide feedback on weekly individual assignments and better guidance on the group projects
3. Overall: improve the statistical skills and knowledge of SPSS of the students.

A budget of 4.138 per year has been provided out of the available project funds to realise this plan.

**What did we actually do to solve this?**

1. One student assistant (SA) was hired to facilitate 4 tutorial groups of about 25 students. Only one student assistant applied to the position due to the late announcement of the position. The PhD student was not available during this block to help with the tutorials. So instead of a tutorial group of 60 students guided by the course coordinator and a PhD student, there were tutorials groups of 25 students guided by a SA.
2. Additional assistance to the students was given through help documents to work with SPSS. These documents were created by the course coordinator and were used by the SA during the tutorial sessions.
3. Additional tutorial session was created during the last week for the group project in which the SA answered questions from the students on the group project.

**Results**

Objective 1:

Based on the course evaluations and discussion with selected students, we inferred the following: Although the students liked the structure of small scale tutorials, they were not satisfied with the amount of guidance provided by the SA. This was because the SA was a past Master Marketing student and she had difficulty to explain the correct procedure to the students. Because of this, students were either misled to a wrong answer or for those who obtained the correct answer, missed the learning process. So the objective to provide additional assistance during the tutorial sessions is not met. This is because we could not arrange a SA as well as a PhD student for guiding the tutorials and the quality of a SA cannot meet the quality of a PhD student or course coordinator.

Objective 2

The average grade of the course was higher than previous years whereas there was no significant difference in the passing percentage (see table below). See below the average grades and passing percentages across the

past years including this year. Although this is a good sign, we have to be cautious in making causal inference that the improvements in the course led to improvement in the grade.

| Year | Average grade of the course | Passing percentage |
|---|---|---|
| 2012-2013 | 7.35 | 91.1% |
| 2013-2014 | 7.1 | 84.9% |
| 2014-2015 | 7.25 | 92.5% |
| 2015-2016 | 7.11 | 86.8% |
| 2016-2017 | 7.48 | 88.8% |

Objective 3
To check if the overall statistical knowledge and skills are improved, we need to ask the thesis instructors regarding the quality of master students. This will be done at the end of this academic year

**What's next**

We would like to continue the improvements/innovation for next year since students like the small scale tutorials. However, the quality of the tutors can be improved. For next year, we plan to improve the quality of the tutor by having one PhD student and hiring better student assistants perhaps from econometrics Master. The former will be arranged by discussing in advance with department head and the latter should be possible by announcing the position in advance.

**What actions are needed? By whom and when?**

The funds are approved for next 3 years, so no additional actions are needed.[9]

[9] NB: The funding has not been granted over the year 2016 because the project has not been realized according to plan (SA as additional assistance).

## 15. Redesign of the course Philosophy of Economics (Jack Vromen)

Evaluation is pending

## 16. Innovating the Finance programme: finance 2

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEB13001 |
| Bachelor or Master programme where the course(s) is offered | Bachelor |
| Period, year and block: | January to February, 2017, block 3 |
| Number of students: | 300 |
| Person in charge of the project: | Esad Smajlbegovic/Patrick Verwijmeren |
| Approved Budget | € 14.800 (realisation € 11.348) |

**What challenge / problem / question did the project address?**

Around 300 bachelor students every year are taking the course Finance 2 as part of their major in Finance. Despite the 'standard' challenges that come with a large lecture class, such as keeping students' attention and elicit questions, responses, or other forms of interaction with the lecture material and the instructor, Finance 2 covers an important field in finance (Derivatives markets) that (1) offers analytically challenging theortical concepts but also (2) requires time-intensive calulations on derivatives.

**How did you plan to solve this?**

The plan was to improve the structure of the lecture overall and to intensify the learning process of the students in several ways.

1. A large number of new practical exercises were introduced as take-home problem sets. Those exercises were similar to examples in the lecture and offered the students additional material to grasp the theoretical and practical concepts studied durnig the lecture.
2. Together with two teaching assistants (TA), we planned to set up an well-structured online forum, in which students could discuss the possible solutions to any of the exercises from the problem sets. This discussion board would be supervised by the two students and me throughout the eight weeks of the course.
3. For those parts of the lecture or problem sets that were not covered during the meeting hours and could not be easily answered in the discussion board, I would build an interactive PDF document. It can be used as a regular PDF (reading, printing, …) but it also video-records all the steps; my writing and my voice. Hence, the student does not only study the written solution, but she can listen to all the steps I go through in order to solve the problem. This interactive PDF document combines the advantages of a webcast and an easy-to-handle PDF document.
4. Together with the two students assistants, I developed a large number of ideas and potential questions for a mid-term exam/project or a project rewarded with bonus points. In this project the students would employ the previously gained theoretical knowledge on derivatives and implement real-world data into a case study about pricing financial derivatives.

**What did you actually do?**

The first three above-mentioned innovations were implemented in the year 2016/17. This year I had new lecture slides and problem sets with each more than 15 exercises on average. The students were offered to post their questions and solutions to the problem sets in a well-structured and very-frequently supervised online discussion board. Three additional interactive PDF documents with a length of approximately 20 minutes of additional explanations were created. The questions for the mid-term project are ready to be used in the next year's Finance 2 course.

**Results**

| |
|---|
| Given that this course was almost entirely build up from scratch and that the course content changed in many ways comparing the previous year, it is difficult to compare the new concepts with the last year's course. However, I believe the all the innovations implemented should be part of the course also next year. It requires some minor adjustments, but the innovations reached my objectives. Below I listed some of the feedback of the students:<br>- "The strongest features of this course are:<br>- The problem sets and the sample exam, all very good explained!<br>- The course is well organized and the material is clearly understandable<br>- The course is relevant and the course material is up to date. In addition; the course is very student-friendly. One of the stongest features are the lecture slides and the presence of Smajlbegovic on the discussion board. He really invested time into his student's questions.<br>- TAs for discussion board, worked very well<br>- Good slides<br>- A lot of material to practice with.<br>- Explicit answers are given for all of the exercises (even for the practice exam).<br>- Lecture slides<br>- Homework exercises and practice exam were good representatives of an actual exam<br>- Well organized, textbook is exceptional and very well-explained. The professor is extremely helpful<br>- Lecture slides and lecturer<br>- The course material is clear and understandable.<br>- Enough exercises to practice<br>- Interesting book that explains difficult topics clearly" |
| **What's next** |
| All the innovations implemented this year and planned for next year will also be incorporated in the future. Some minor changes of the content will be applied. However, given that the helpful but very time-intensive presence on the online discussion board requires additional funding (hiring a one TA), this innovation is conditional on the approval of additional budget. |
| **What actions are needed? By whom and when?** |
| Talk with the department head about the possibilities to acquire additional funding for the course Finance 2.[10] |

[10] NB; this is not part of the QIP but the responsibility of course coordinator and department head.

## 17. Innovating the Finance programme: Financial methods and Techniques

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEB13011 Financial Methods and Techniques |
| Bachelor or Master programme where the course(s) is offered | Bachelor 3: EB/IBEB/BSc2 |
| Period, year and block: | Blok 3, 2016/2017 |
| Number of students: | 200 |
| Person in charge of the project: | Rogier Quaedvlieg, Patrick Verwijmeren |
| Approved Budget | € 7.400 (realisation € 8.962) |

**What challenge / problem / question did the project address?**

The course had to be redesigned to better fit the needs within the curriculum. Second, the course was mostly lecture based, and the grade was only based on a final exam. Student engagement needed to be improved during the course, with less emphasis on the final week.

**How did you plan to solve this?**

The software used in the course was changed from Eviews to Stata, to better match the student's needs for their theses and assignments. The difficulty of the course is increased, with a greater focus on understanding, and applications. The weight on the exam is to be reduced by mid-term assignments. Lectures are accompanied by webcasts and tutorial sessions.

**What did you actually do?**

The course was completely redesigned with these goals in mind. Most of the planned changes have taken place this year, and the remainder is planned for next academic year. This year, the course switched to Stata. The difficulty of the course was increased. In collaboration with the research assistant, we developed weekly stata exercises around the lectures and a mid-term hand-in assignment counting for 10% of the grade. Preparation for the webcasts was done, but they have not been deployed this academic year.

**Results**

Based on student evaluations, the changes in the course were received well. The level of the course was improved, and based on conversations with my colleagues their use of statistical software is significantly improved compared to previous years.

**What's next**

The hand-in assignment will be further tweaked, and its relative weight will increase. The complementary web-casts will be used. The course curriculum was redesigned from scratch, and as such it will be further tweaked in the following years.

**What actions are needed? By whom and when?**

The investment done this year provides a foundation to build on and incrementally improve the course the following years.

## 18. Innovating the Finance Program: Master Thesis Preparation Course

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEM11067 - Master's Thesis Financial Economics |
| Bachelor or Master programme where the course(s) is offered | |
| Period, year and block: | Master (year 1 of 1), block 4 |
| Number of students: | Open to all 399 students, plus students "Accounting, Auditing and Control" and "Accounting and Finance" |
| Person in charge of the project: | S. van Bekkum |
| Approved Budget | € 14.800 (realisation € 15.000) |

**What challenge / problem / question did the project address?**

The Master thesis requires collecting and analysing data in order to answer a research question that is underpinned by academic literature. However, ESE does not offer academic skills or statistics courses to master's students. Students who did their bachelor´s at ESE have written a thesis before, understand what is expected of them, and tend to be sufficiently trained in data management and statistical analysis, but many students with a different background do not have such training and often lack any experience with writing a thesis. This leads to very long thesis supervision trajectories, with students who struggle to master the required skills to write an empirical thesis and supervisors who presume a certain level of training and background.

**How did you plan to solve this?**

The Master Thesis Preparation course is intended to be an intense course where students are optimally prepared for writing their thesis (involving procedures, topic selection, popular econometric techniques and writing). This consists of the following meetings:

1. Kickoff meeting that explains the procedure how to write a proposal based on the topics made available from supervisors within the finance group
2. Data meeting that explains what resources are available at Erasmus University to collect data (and learn how to do it)
3. Three meetings in which students learn how to use Stata in order to organize datasets and analyse them.

For Part 3, I have created new materials that are based on the Official Stata Manual. This manual consists of 3000+ pages from which I have selected a list of about 60 commands that are the most useful ones when writing a thesis. I have grouped these commands in a logical way, summarize and explain them and their options in a nontechnical way. For each command I have created example code so that students can try the commands out for themselves. I also search or create datasets for this purpose. The goal was to create searchable materials can be used as a reference guide when writing a thesis, yet summarize them in a way that makes it more useful than the official Stata Manual.

Based on these materials I have given three lectures on Stata, providing an accessible introduction to Stata that shows students how to do things in a step-by-step fashion, and allows them to try these things out in the context of their own thesis. If they run into problems, of have trouble translating commands to their thesis, students have the opportunity to ask me immediately, during breaks, or during the next session.

Compared to the old situation, where students were only guided by their supervisors based on the output they have generated (e.g., literature review, a first draft of the thesis: zero interaction before that stage), the innovation is to guide students based on the process of generating this output and help them acquire the skills they need to do so successfully. Since I go over my materials with the students together, this approach is quite interactive.

**What did you actually do?**

I implemented all the improvements and innovations.

**Results**

I have evaluated the Master Thesis Preparation Course through an online survey that students have filled in voluntarily. The layout resembles the official course evaluation survey.

| Omschrijving | Finance | AAC |
|---|---|---|
| This course is relevant for my studies. | 4.7 | 4.7 |
| I expect this course will save me time when writing my master thesis. | 4.3 | 4.3 |
| This course makes me feel more confident that I can succesfully complete my master thesis. | 4.0 | 4.2 |
| I have learned things in this course that I would not have learned independently, by myself. | 3.9 | 4.0 |
| This course has taught me what I expected to learn. | 4.0 | 4.0 |
| The written course materials are relevant and understandable. | 4.1 | 4.2 |
| Lecturer dr. S. van Bekkum has explained the subject matter well. | 4.3 | N/O |
| Lecturer dr. S. van Bekkum makes you enthusiastic for the subject. | 4.3 | N/O |
| Lecturer dr. S. van Bekkum has a good command of the English language. | 4.7 | N/O |
| How was the speed at which materials were discussed in Lecture 1? (1=slow, 3=good, 5=fast) | 3.2 | 3.2 |
| How was the speed at which materials were discussed in Lecture 2? (1=slow, 3=good, 5=fast) | 3.3 | 3.6 |
| How was the speed at which materials were discussed in Lecture 3? (1=slow, 3=good, 5=fast) | 3.1 | 3.2 |
| This course should be made a compulsory part of the Master thesis next year. | 3.9 | 4.7 |

I have only received positive feedback. The student representative has recommended the Educational Board that my course would also be helpful early in the year, to prepare students for the seminars (that sometimes also require knowledge about Stata)

**What's next**

I would be happy to do this again next year. If possible in terms of scheduling, I could move the lecture to block 2 instead of block 4. Of course, I would continue updating and improving my materials to further fulfill the needs of students.

**What actions are needed? By whom and when?**

## 19. Intensified Learning and feedback in quantitative methods (Pilar Garcia Gomez)

Evaluation is pending

## 20. Professionalization of NLO challenges for excellent students

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEB22006(X) - Non-linear Optimization |
| Bachelor or Master programme where the course(s) is offered | B2 Econometrics |
| Period, year and block: | Block 2, 2017-2018 |
| Number of students: | 350 students, 11 participants |
| Person in charge of the project: | Kevin Dalmeijer |
| Budget granted | 800,- |

**What challenge / problem / question did the project address?**
(Short description of the teaching situation and the challenge, problem or question you addressed)

To professionalize the NLO challenges for excellent students. The NLO challenges are non-linear optimization problems that are difficult to solve, and I ask students to submit their best solution. All solutions are then published online on a high score board. Participation is voluntary, and there is no gain for the students, except for everlasting fame.

Three goals were formulated:

1. Challenge our excellent students to go above and beyond what they have learned, to solve very challenging problems.
2. Excite our students about the field of non-linear optimization.
3. Build a collection of pencasts that are also interesting for the non-active participants.

**How did you plan to solve this?**
(What educational improvement(s) / innovation(s) did you suggest in your proposal?
What was the intended outcome or objective of the improvement(s) / innovation(s)?)

I proposed the following bi-weekly schedule:

- Tuesday, week 1: I announce the NLO challenge via a pencast: a short video in which the students can see me writing and hear me talking at the same time.
- Monday, week 2: based on the current highscores and submissions, I will invite students to make a short pencast (approximately 5 minutes). I will lend them a smartpen, so they can create a pencast at their own convenience.
- Wednesday, week 2: deadline for the student pencasts. All pencasts are published online for all students.
- Friday, week 2: active participants join the discussion session. They have prepared by watching the others' pencasts, so we have more time for the actual discussion.

**What did you actually do?**

(Did you implement all improvement(s) / innovation(s)? If not, why not? Or if not exactly, what did you change and why?)

The innovations were implemented exactly as proposed.

**Results**
(What where the results of your actions? How did you measure the results of your improvement(s) / innovation(s)? Did you reach your objective / intended outcome? What feedback did you receive form students/ the student representative?)

Out of the 350 students, 11 students participated in the NLO challenges. It was predicted in advance that this number would be low (less than 20), as the NLO challenges are aimed specifically at our best students. The previous year, we also did NLO challenges, but without the bi-weekly schedule, and without the pencasts. I will be comparing this years' results to the results of last year. As the number of students is small, this evaluation is based on the communications that I had with the active students.

The intention of the stricter schedule and the pencasts was to be able to give the students more recognition for their work. Being asked to make a pencast should feel like an honor, and in the discussion sessions the students can show off their method.

The students indeed saw it as an honor when they were asked to make a pencast. However, the request was often politely declined. Students find it scary to make a pencast, or doubt that their method is good enough, even after I reassure them. I also doubt that the non-active participants view the pencasts. In hindsight, letting the students make pencasts did not improve the NLO challenges.

The discussion sessions were only visited by at most three students per session. The sessions itself were very good, and allowed the students to actively participate and feel valued. However, I would have liked more participants to visit. Some students told me that they would like to join, but that joining the session would require multiple hours of travel. Another reason for the low attendance, is that NLO is already quite an intensive course, and students were often busy with the regular exercises.

Just like last year, the NLO challenges were a success, and I think I definitely managed to challenge the excellent students (objective 1). I also think I excited students about non-linear optimization (objective 2), as I was asked a couple of times about the different majors, and how they involve non-linear optimization.

However, the professionalization of the NLO challenges, with the bi-weekly schedule and the pencasts, did not improve the quality of the NLO challenges. Also, I did not manage to involve the non-active participants (objective 3). In my proposal, I mentioned the risk that making pencasts or joining a discussion session could be too high of a barrier for students. I was convinced this barrier would be less important for highly motivated students, but it turned out to be significant after all.

**What's next**
Do you continue the improvements/innovation next year? If not, why not?
What will you change? What will you keep? What needs another test run?

| |
|---|
| The NLO challenges itself are a great concept, but the new setup did not improve the quality. Next year, I will try to find a new structure that does involve more students, and involves them more actively.<br><br>It has become clear that asking students to make pencast does not work for me in this setting, and I will not be asking that again next year. The project budget was used exclusively to buy four smart pens. These smart pens have been returned to the Innovation Hub, so that they can be used in other projects. |
| **What actions are needed? By whom and when?**<br>What needs to be done/what conditions need to be met to continue next year? |
| I will try to find a new structure for the NLO challenges next year, to meet all the intended outcomes, taking into account what I have learned this year. |

## 21. Introducing Eur Game App in Fiscale Economie

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEB 12010 Fiscale economie |
| Bachelor or Master programme where the course(s) is offered | B2 economie/ bedrijfseconomie |
| Period, year and block: | Block 2, 2017-2018 |
| Number of students: | 584 |
| Person in charge of the project: | Rolph van Ovost |
| Budget granted | € 5500,- |

**What challenge / problem / question did the project address?**
(Short description of the teaching situation and the challenge, problem or question you addressed)

Part of the exam is Multiple Choice. In the tutorials we normally worked with practical problems and open questioning. Students ask a possibility to train themselves with MC questioning. We wanted to activate them to work with the exam material of previous years, and the literature.

**How did you plan to solve this?**
(What educational improvement(s) / innovation(s) did you suggest in your proposal?
What was the intended outcome or objective of the improvement(s) / innovation(s)?)

We launched the EUR game app for Fiscal Economics. The EUR game app gives the students the opportunity to study time and place independently by answering questions, and the teacher the opportunity in (practically) practicals to reflect on areas where students score less well. The teacher can keep an eye on the progress of the students.

**What did you actually do?**
(Did you implement all improvement(s) / innovation(s)? If not, why not? Or if not exactly, what did you change and why?)

Yes we did

**Results**
(What where the results of your actions? How did you measure the results of your improvement(s) / innovation(s)? Did you reach your objective / intended outcome? What feedback did you receive form students/ the student representative?)

The result was that students started working on the literature earlier and more intensively. That students asked for an explanation about specific questions. We were able to see in the tutorials that the students were better prepared and participated more intensively. So we were satisfied with the intended outcome. The student representatives where positively about the app and the possibility to use it, also in the course evaluation the app is mentioned a number of times as a positive point.

| |
|---|
| **What's next**<br>Do you continue the improvements/innovation next year? If not, why not?<br>What will you change? What will you keep? What needs another test run? |
| Yes, the investment in the app is usefull for next year, we only have to assess whether all questions are still relevant next year. We will also consider If we need to add new questions to the app. |
| **What actions are needed? By whom and when?**<br>What needs to be done/what conditions need to be met to continue next year? |
| We only have to assess whether all questions are still relevant next year. |

## 24. Realising more individual feedback by introducing Autolab

Innovation Hub project

| | |
|---|---|
| Course(s) concerned (name and number: | FEB22002(X) - Combinatorial optimization |
| Bachelor or Master programme where the course(s) is offered | B2 Econometrics |
| Period, year and block: | Blok 1 2017-2018 |
| Number of students: | about 300 |
| Person in charge of the project: | Wilco van den Heuvel |
| Budget granted | 3680,- |

**What challenge / problem / question did the project address?**
(Short description of the teaching situation and the challenge, problem or question you addressed)

The project addressed the following main challenges for two computer-based assignments:

1. Create an Autolab environment for the Matlab assignment in order to (i) provide immediate and individual feedback to students, and (ii) to easily grade the students' codes.

2. Create an "answer sheet" Autolab environment for the Aimms assignment in order to (i) easily grade the students' solutions, and (ii) provide limited feedback.

**How did you plan to solve this?**
(What educational improvement(s) / innovation(s) did you suggest in your proposal?
What was the intended outcome or objective of the improvement(s) / innovation(s)?)

1. Autolab allows instructors to create automatically graded programming assignments, which means that the current assignments need to be converted to Autolab. Students are allowed to hand in assignments (programming codes) multiple times and get immediate feedback on their work, which enables them to quickly learn from their mistakes. It also allows the instructors to grade the programs of the students more objective and stricter, since Autolab already tests if the program functions correctly.

2. The main objective here is to ease the grading of the (Aimms) assignment. With the use of the web-based form, checking of the solutions can be done automatically (instead of manually in the past, where students hand in their solutions in Blackboard, students assistants download all files, and correct the assignment).

**What did you actually do?**
(Did you implement all improvement(s) / innovation(s)? If not, why not? Or if not exactly, what did you change and why?)

All improvements have been implemented.

**Results**

(What where the results of your actions? How did you measure the results of your improvement(s) / innovation(s)? Did you reach your objective / intended outcome? What feedback did you receive form students/ the student representative?)

When talking to the TAs and a limited number of students, they seemed to be positive about the immediate feedback given by the Autolab system. Furthermore, relatively more students have handed in the Matlab assignment compared to previous years.

In the standard ESE questionnaire, none of the students mentioned the use of Autolab in a positive or negative way. Apparently, the students are already used to it as it has been applied in the Programming course before.

For the lecturers the grading of the assignment was much more efficient (although setting up the whole system took a lot of time).

**What's next**
Do you continue the improvements/innovation next year? If not, why not?
What will you change? What will you keep? What needs another test run?

We will continue with the whole project next year without major changes. There will be some minor (mainly practical) changes where:
- the enrollment of students in groups will be made easier
- handing in some solutions through the web-form will be made more convenient
- it will check whether the jobs can be scheduled in a smarter way in order to reduce waiting time (see also below)

**What actions are needed? By whom and when?**
What needs to be done/what conditions need to be met to continue next year?

There should be enough computer server capacity. The Programming course is running parallel and uses the same servers. It turned out that the automatic grading of all students took more than one night, while the Programming course had a deadline where students had to hand in an assignment at the same time, which caused a shortage of server capacity (waiting time for students).

It is not clear who should arrange this. Currently, Paul Bouman is taking care of the servers (which are rented externally) while this shouldn't be part of his job. It would be nice if there is a dedicated ICT person at ESE taking care of Autolab (which is now used by multiple courses). This should be arranged before the course starts, which is Sep 2018.

The following projects are not finished yet:

| | |
|---|---|
| 22. Interactive learning in the course Applied Statistics 2 via Sowiso | Andreas Alfons |
| 23. Further Development “Formative assessment” (Quizzes) | Michel van der Wel |
| 25. Introduction of a digital tool to facilitate peer to peer feedback and presenting assignments | Bas Karreman, Omar Rickets |
| 26. Introducing the Eur Game App in the course Organisation and Strategy | Bas Karreman |
| 27. Intensification of the Financial Economics Master Programme 1 | Patrick Verwijmeren |
| 28. Intensification of the Financial Economics Master Programme 2 | Han Smit |
| 29. Improving interaction and selfstudy | Martijn van der Horst |
| 30. Goal setting experiment Econometrics | Erik Kole |
| 31. Practice makes Perfect; Introducing online excercises to practice bookkeeping skills | Jeroen Suijs |
| 32. Redesign tutorials Advanced Management Accounting | Ted Welten |
| 33. Improving Student Preparation | Laura Hering |

| Decision number | Date | Document number (ese) | Decision |
|---|---|---|---|
| 352-1 | 11/6/2017 | | The management team has decided to appoint a second Vice Dean at ESE who will deal with research issues, and who will be the director of research as well. As such Professor Enrico Pennings will be appointed as vice dean research from April 1 2018 onwards, initially for a period of 2 years, which for both functions can be extended every 4 resp. 2 years. The School Council has approved of the appointment (letter dated 7 November 2017). |
| 352-2 | 11/6/2017 | 36453 | The request of EQI BV to register their post-graduate programme "Executive Program Data Analytics for Marketing Engineering" in the EUR register for non-initial education, has been granted by the Management Team. The Executive Board EUR will be asked to take care of the actual registration. |
| 353-1 | 11/13/2017 | 36473 | The MT agrees with the ESE Periodical Financial Report until October 2017 (report nr 4) as presented in this meeting, including some minor changes. The report, including the required tables will be sent to the Executive Board shortly. |
| 355-1 | 11/27/2017 | 36523 | The ESE Factsheet 2017 (based on situation August 2017) as discussed, is adopted and will be sent to the Executive Board EUR upon their request for presentation to the Supervisory Board EUR. |
| 355-2 | 11/27/2017 | 36525 | The request of EQI BV to register their post-graduate programme "Executive Program Strategische kijk op Data Analytics" in the EUR register for non-initial education, has been granted by the Management Team. The Executive Board EUR will be asked to take care of the actual registration. |

| Decision number | Date | Document number (ese) | Decision |
|---|---|---|---|
| 356-1 | 12/4/2017 | 36542 | The MT approves of the proposition to offer TI Mphil students positions as research assistants at Erasmus School of Economics, for 0.2-0.5 fte. Preferably 5-10 Mphil students a year (1-2 per research programma), can get an appointment via the departments (to be paid by the Dean's budget) for a period of 4 years. The research office will inform the programme leaders accordingly. For matching, help of TI-DGS wil be asked for if needed. |
| 356-2 | 12/4/2017 | | After consulting the director's (meeting of 21 November 2017) the following decision was made in connection with a revised composition of the Council for the Appointments and Promotions (CBBA), in order to improve the diversity of the committee. The MT adopts this decision:<br>- Each department is allowed to send two representatives from their CBBA members (either associate or full professors) to a CBBA meeting, one male and one female.<br>- The department director will make the final decision about the representation, in such a way that in total at least 2 female representatives will be present at each CBBA meeting.<br>- Members can attend meetings about files up to and including their own rank.<br>- The new rules will be published on the website. |

**Overzicht poststukken Erasmus School of Economics**
**periode 01.11.2017 t/m 30.11.2017**

| | |
|---|---|
| *Stuknummer:* | ese0036445 |
| *Datum poststuk:* | 01/11/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | college van Bestuur |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | inventarisatie kerstpakketten 2017 |
| *Actie medewerker:* | secretariaat b&b ese |
| *Actie:* | afh |
| *Deadline:* | 17/11/2017 |

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| | |
|---|---|
| *Stuknummer:* | ese0036516 |
| *Datum poststuk:* | 16/10/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | nvao |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | def. besluit met positieve beoordeling opleiding wo-master executive master of finance and control |
| *Actie medewerker:* | education management |
| *Actie:* | tk |
| *Deadline:* | |

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| | |
|---|---|
| *Stuknummer:* | ese0036518 |
| *Datum poststuk:* | 14/11/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | faculteitsraad |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | goedkeuring faculteitsraad ese strategisch plan (update) 2017-2023 en verzoek om nadere informatie |
| *Actie medewerker:* | hoofd bestuur en beleid |
| *Actie:* | afh |
| *Deadline:* | |

**Overzicht poststukken Erasmus School of Economics**
**periode 01.12.2017 t/m 31.12.2017**

| | |
|---|---|
| *Stuknummer:* | ese0036602 |
| *Datum poststuk:* | 05/12/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | school council ese |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | school council approves nomination of y. tigelaar and r. ovost as staff members of programme committee economics and taxation |
| *Actie medewerker:* | p. endeveld |
| *Actie:* | afh |
| *Deadline:* | |

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| | |
|---|---|
| *Stuknummer:* | ese0036603 |
| *Datum poststuk:* | 07/12/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | college van bestuur |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | executive program data analytics voor marketing engineering is opgenomen in eur register niet-initieel onderwijs |
| *Actie medewerker:* | i. versluis |
| *Actie:* | tk |
| *Deadline:* | |

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| | |
|---|---|
| *Stuknummer:* | ese0036615 |
| *Datum poststuk:* | 12/12/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | koninklijke nederlandse akademie van wetenschappen |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | oproep nominaties heineken young scientists awards 2018. |
| *Actie medewerker:* | as de rijk |
| *Actie:* | afh |
| *Deadline:* | 01/02/2018 |

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| | |
|---|---|
| *Stuknummer:* | ese0036641 |
| *Datum poststuk:* | 13/12/2017 |
| *Ref/Kenm:* | e&s/rl/ra00276462 |
| *Afzender:* | college van bestuur |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | executive program "strategische kijk op data analytics" is opgenomen in eur register niet-initieel onderwijs |
| *Actie medewerker:* | education management |
| *Actie:* | tk |
| *Deadline:* | |

| | |
|---|---|
| *Stuknummer:* | ese0036668 |
| *Datum poststuk:* | 19/12/2017 |
| *Ref/Kenm:* | |
| *Afzender:* | research netspar |
| *Geadresseerde:* | decaan ese |
| *Inhoud:* | netspar calls for  proposals related to pensions, aging and retirement |
| *Actie medewerker:* | research office ese |
| *Actie:* | afh |
| *Deadline:* | |

**Erasmus School of Economics**

To:
Professor dr. Philip Hans Franses

**Date**
08-01-2018

**Subject**
Approval
Re-structuring ESE secretariats

**Our reference**

**Your reference**

**Page**
1/1

**Appendix**
none

**Department**
School Council

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**W** www.eur.nl/ese/english

Dear Professor Franses,

On behalf of the Personnel Council, I hereby confirm the outcome of the meeting of a representation of the Personnel Council with the secretaries regarding the formalisation of the re-structuring the ESE secretariats.

The secretaries that were present at the meeting are confident that the manager secretarial support Ramona Ligthart has thorough understanding of their work and thus will be able to assess their performance without the presence of office manager and/or department director. They would like to stress that the manager secretarial support should consult the office manager to complete the picture of their performance.

The secretaries are satisfied with the cooperation; however, they would like to stress that in case of replacement, improvement of certain practical issues, such as access to the systems, is essential.

Finally, they would like to emphasize again that, after relocation to the renovated Tinbergen Building, they want to remove to their own departments (instead of one central location).

Concluding, with the above-mentioned points to note, the Personnel Council approves the formalisation of restructuring the ESE secretariats.

With kind regards,

Harry Trienekens,
Chair Personnel Council 2017-2018